

EXHIBIT 55

THE UNIVERSITY OF TEXAS AT AUSTIN

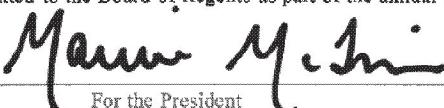
Date: 9/12/2016

RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS

Name: Sun, Nan EID: ns22375 Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2016-17 in each count*):At UT Austin since: 1/16/2011 (month/day/year) Total Years at UT Austin: 6.5In Present Rank since: 1/16/2011 (month/day/year) Total Years in Present Rank: 6.5*Tenure-track only:*Number of Years in Probationary Status: 5Additional information: Probationary Extension 2015-16Primary Department: Electrical and Computer EngineeringCollege/School: Engineering, Cockrell School ofJoint Department: N/ACollege/School: N/AOther Department(s): N/ARecommendation actions¹:By Budget Council/Executive Committee: PromoteVote² for promotion 32; Against 0; Abstain 2; Absent 0; Ineligible to vote 1By Department Chair: PromoteBy College/School Advisory Committee: PromoteVote² for promotion 7; Against 0; Abstain 0; Absent 0; Ineligible to vote 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2017

(To be submitted to the Board of Regents as part of the annual budget.)

By: _____



For the President

Date: December 15, 2016¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of committee members ineligible to vote should also be recorded. Enter zero where it would otherwise be blank.

Dean's Assessment

Nan Sun

Department of Electrical and Computer Engineering
Cockrell School of Engineering

Dr. Nan Sun received his BS in Electronic Engineering from Tsinghua University in 2006. He received his PhD from Harvard University in Engineering Science in 2010. Dr. Sun joined the faculty in the Department of Electrical and Computer Engineering (ECE) at the University of Texas at Austin (UT) in January 2011. If successfully promoted to associate professor in September 2017, he will have accumulated five years of probationary service.

This is not an up-or-out case because the 2015-16 academic year did not count toward Dr. Sun's probationary service. The department decided to put the case forward one year prior to the mandatory review following a budget council vote in early spring.

Twelve external letters were submitted as part of the promotion dossier, of which, six writers were nominated by Dr. Sun, and six were selected by the budget council. Nine letter writers are faculty members at universities in the US: UC Berkeley, UCLA, UC San Diego, Colorado, Columbia, Michigan, Oregon State, Stanford, and Texas A&M. One is a member of the National Academy of Engineering (NAE). Two letter writers are faculty at international universities (IIT Madras and Toronto), and one is from industry (Texas Instruments).

Teaching

Dr. Sun's teaching has been in the area of integrated circuit (IC) design, which addresses the design, simulation, fabrication, and testing of circuits on a single chip. He has taught two undergraduate electives: EE 338K, *Electronic Circuits II* (taught once), and EE 338L, *Analog IC Design* (taught three times). EE 338L is cross-listed as a graduate course, EE 382M-14. Dr. Sun also taught an advanced graduate course on mixed-signal integrated circuit design, EE 382V, *Data Converters* (taught four times).

Dr. Sun's overall average undergraduate instructor rating of 4.63 is considerably higher than the corresponding values for assistant professors in ECE (4.21) and in the Cockrell School (4.17). At the graduate level, Dr. Sun's overall instructor rating is 4.84, which is considerably above the average for assistant professors in ECE (4.43) and in the Cockrell School (4.34). His CIS scores are indicative of his effective teaching style and concern for the students.

Senior faculty conducted peer evaluations of Dr. Sun's lectures five times, and each provided extremely positive assessments of his teaching style.

Research

Dr. Sun has made significant contributions in the field of analog and mixed-signal integrated circuit (IC) design. Specifically, he advanced the sub-areas of low-power analog techniques, time-domain signal processing, advanced analog-to-digital conversion techniques, frequency synthesis, and compressive sensing based analog front-ends. While his research addresses fundamental problems, Dr. Sun is interested in the translation of this work to several signal communication applications and consumer products.

Highlights of Dr. Sun's research include:

- 23 archival journal papers (27 total) and 34 peer-reviewed conference proceedings (37 total) in rank. Fifteen of the journal papers were co-authored with his students.
- His publications have appeared in journals with impact factors (IF) that range from 9.4 (*Proceedings of National Academy of Science*) to 0.93 (*Electronics Letters*).
- Co-author of four book chapters.
- An h-index of 12 (Google Scholar) with 489 career citations.
- Three patent applications pending in rank

Dr. Sun's publication record increased significantly during the second part of his probationary period after the University of Texas signed an agreement with the leading IC foundry, Taiwan Semiconductor Manufacturing Company (TSMC). Dr. Sun needs a foundry to manufacture the integrated circuits that he designs.

While in rank, Dr. Sun has secured \$3.4 million in external funding, of which approximately \$1.7 million is his share. His funding includes three grants from the National Science Foundation (NSF), two of them as PI. One of grants is an NSF CAREER Award on "Combining Nuclear Magnetic Resonance with IC Technology." He also teamed with Dr. Nanshu Lu (Department of Aerospace Engineering and Engineering Mechanics) and a group of researchers at the University of Washington on an NIH grant related to monitoring muscle activity after a neurologic injury.

Dr. Sun has received research grants and gifts from industry, including Samsung, Texas Instruments, Cirrus Logic, and Intel. He has also received in-kind funding in the form of 11 free silicon fabrication shuttles, corresponding to a value of more than \$0.7 million (\$0.5 million his share).

The external references highlighted the innovative aspects of Dr. Sun's work and noted his creativity. Representative comments are summarized below:

Gabor C. Temes¹ (Oregon State, NAE) writes, "I found Dr. Sun's productivity highly impressive. The number of his publications in highly-regarded and selective journals and conferences is very high." And he concludes with this prediction: "Extrapolating from the 5-year record of Prof. Sun, I predict an exceptionally successful future career for him."

Shanthy Pavan² (Indian Institute of Technology Madras, Indian National Academy of Engineering) provides a revealing comment about Dr. Sun's early "work, nicknamed the 'pocket NMR', made waves in the IC design community for its ingenious application of IC technology to an area finding applications in diverse fields, ranging from chemical analysis to biosensing." He adds that "I distinctly remember, while reading Nan's papers on this subject 6 or 7 years ago, saying to myself this author is going to go far." Pavan compares Dr. Sun's research output with others in his worldwide cohort, "I have no hesitation in saying that Nan is among the best of the best. In fact, I cannot think of another assistant professor who has performed so well in a particularly difficult area like data-conversion." Pavan concludes: "In summary, Nan Sun is simply outstanding - I have been following his work for about 7 years now. In a less formal document, I would have said that his case for tenure is a no-brainer."

¹ Professor, School of Electrical Engineering and Computer Science

² Professor, Department of Electrical Engineering

David J. Allstot³ (UC Berkeley) writes: "He impressed me with his world-class blend of creativity, analytical capabilities, experimental acumen, and breadth. His NMR work, for example, has combined deep aspects of physics, molecular engineering, signal processing, and analog/mixed-signal IC design." Concerning his research productivity and the quality of his work, Allstot notes: "The quantity of Prof. Sun's production is impressive. Many of us evaluate productivity informally based on an expectation of two archival journal papers and four conference papers per year measured over a number of years determined by the Ph.D. graduation year. Prof. Sun received his Ph.D. in 2010 so with 26 archival journal papers and 36 conference papers, he easily exceeds this difficult metric." Allstot concludes by offering the "strongest possible support for promotion to Associate Professor with indefinite tenure."

Boris Murmann⁴ (Stanford) praises Dr. Sun's work on digitally assisted analog circuits by stating that it... "contains unique and new ideas that have brought these algorithms from an academic curiosity to a state that is now much more applicable to actual products." He goes on to state, "Dr. Sun's group has published a number of creative ideas."

The letters written by Ian Galton⁵ (UC San Diego) and Edgar Sanchez-Sinencio⁶ (Texas A&M) were generally positive and recommended promotion, but raised a few concerns.

- Galton questioned why Dr. Sun chose to publish several papers in rank in the lower impact factor journals *IEEE Transactions on Circuits and Systems II: Express Briefs* (IF=1.1) and *IEEE Electronics Letters* (IF=0.93), rather than in the *IEEE Journal of Solid-State Circuits* (JSSC) (IF=3.3) or the *IEEE Transactions on Circuits and Systems I: Regular Papers* (IF=2.4).
- Sanchez-Sinencio recommended that Dr. Sun "increase the number of publications in top journals."
- Galton also advised "Professor Sun to write such papers (in high-impact journals) in a more balanced, analytical fashion. Many of his papers contain good ideas, but they sometimes contain sweeping statements, often without proof, about the benefits of his ideas and the drawbacks of previously published techniques."

Advising and Student Mentoring

Dr. Sun has graduated four PhD (one co-supervised) and 14 MS students, and one former student is currently an assistant professor at the University of Buffalo. Dr. Sun is currently supervising 11 PhD students (two co-supervised) and two MS students.

University Service

Dr. Sun has served on the Parking and Traffic Appeals Committee at the university level and on five departmental committees, including the future of ECE curriculum reform committee, the ECE integrated circuits and systems area graduate admissions committee, and two faculty search committees. In addition, he has been the organizer for the ECE integrated circuits and systems seminar series since 2011.

³ Professor in Residence, Department of Electrical Engineering and Computer Science (formerly Department Chair, Department of Electrical Engineering, University of Washington)

⁴ Professor, Department of Electrical Engineering

⁵ Professor, Department of Electrical and Computer Engineering

⁶ Endowed Chair, Department of Electrical and Computer Engineering

Professional Service

Dr. Sun has been active in several professional organizations and has served on various organizing committees. He is an associate editor for the *IEEE Transactions on Circuits and Systems I: Regular Papers* and a member of the editorial board for the *Journal of Semiconductors*. He has served as a member of the technical program committee for the Custom Integrated Circuits Conference, continuously since 2012 and for the Asian Solid-State Circuits Conference during the same period. Dr. Sun serves as the vice chair of the Central Texas Joint Chapter of the IEEE Solid-State-Circuits Society and the Circuits-and-Systems Society.

Other Evidence of Merit or Recognition

Dr. Sun received a CAREER Award from the National Science Foundation in 2013. In addition, his work has been featured in the scientific and popular press, including the *EE Times*, *R&D Magazine*, *Electronics Weekly*, and the *MIT Technology Review*.

Overall Assessment

Dr. Sun has established a strong research program in a mature field, and he is moving into the highly promising field of analog sensor design. His work has shown wide applicability in various application spaces, and he has developed deep relationships with industry, as evidenced by the recurring financial support provided by several companies for his research endeavors. Reference letters are overwhelmingly positive. While a few reviewers made suggestions to improve the impact of his publications, all recommended promotion. Dr. Sun has proven to be an excellent teacher and mentor. His record of service is solid.

The Cockrell School Promotion and Tenure Committee discussed the concerns expressed in the letters at length. In the end, they agreed with the department chair's and budget council's assessments and unanimously supported promotion.

Overall, I believe that Dr. Sun's performance meets or exceeds expectations for promotion to associate professor with tenure in all categories, and I support this case without reservation.



Sharon L. Wood, Dean
18 October 2016

Master Promotion Summary Table
Nan Sun

Metric	Value
Peer-reviewed journal publications (in rank <i>and total</i>)	23 / 27
Peer-reviewed conference proceedings (in rank <i>and total</i>)	34 / 37
Number of <i>journal</i> papers <i>in rank</i> with UT students <i>as co-authors</i>	15
Total citations of all publications (career) <i>from ISI Web of Knowledge</i>	228
h-index (career) <i>from ISI Web of Knowledge</i> *	7
Total citations of all publications (career) <i>from Google Scholar or Publish or Perish</i>	489
h-index (career) <i>from Google Scholar or Publish or Perish</i> *	12
Total external research funding raised	\$3.4M
Total external research funding raised (candidate's share)	\$1.7M
Total number of external grants/contracts <i>awarded</i>	18
Number of external grants/contracts <i>awarded</i> as PI	16
PhD students completed†	3.5 (3 sole advisor)
MS students completed†	14 (14 sole advisor)
PhD students in pipeline (as of 09/2016) †	10 (9 sole advisor)
MS students in pipeline (as of 09/2016) †	2 (2 sole advisor)
Number of courses taught	8
Total # of students taught in organized courses	256
Average instructor evaluation for UG courses	4.55
Average instructor evaluation for Grad courses	4.83
Average course evaluation for UG courses	4.30
Average course evaluation for Grad courses	4.65
Teaching awards	0
Student organizations advised	0
Undergraduate <i>researchers</i> supervised	6
Service on journal editorial boards	2
Number of symposia organized	5

*Provide a printout/screen shot of the first page of the report from both *ISI Web of Knowledge* and *Google Scholar*

† Count a student as 1.0 if sole supervisor and 0.5 if co-supervised.

Nan Sun
 Department of Electrical and Computer Engineering
Course Rating Averages

What source was used to complete this chart? My CIS

EE 338K: Electronic Circuit II

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Spring 11	41	24	4.8	4.5
Mean	41	24	4.8	4.5

EE 338L: Analog IC Design

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Fall 12	57	37	4.5	4.3
Fall 14	58	39	4.6	4.4
Fall 15	58	33	4.3	4.0
Mean	58	36	4.5	4.2

EE 382V: Data Converters

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Spring 12	20	19	5	4.9
Spring 13	15	14	4.9	4.8
Spring 14	11	10	4.6	4.6
Spring 15	10	10	4.8	4.3
Mean	14	13	4.8	4.7

Table 1. Research Summary

Metric	Value
Peer-reviewed journal publications (in rank <i>and total</i>)	22 / 26
Peer-reviewed conference proceedings (in rank <i>and total</i>)	34 / 37
Number of <i>journal</i> papers <i>in rank</i> with UT students <i>as co-authors</i>	14
Total citations of all publications (career) <i>from ISI Web of Knowledge</i>	228
h-index (career) <i>from ISI Web of Knowledge</i> *	7
Total citations of all publications (career) <i>from Google Scholar</i>	489
h-index (career) <i>from Google Scholar</i>	12
Total external research funding raised	\$3.4M
Total external research funding raised (candidate's share)	\$1.7M
Total number of external grants/contracts <i>awarded</i>	18
Number of external grants/contracts <i>awarded</i> as PI	16

Table 2. External Grants and Contracts Awarded (Total \approx \$3.4M; My Share \approx \$1.7M)

Role of Candidate and Co-Investigators	Title	Agency	Project Total	My Share	Grant Period
PI: Nan Sun David Pan (co-PI)	SHF: Small: Design/Automation for Synthesizable and Scaling Friendly Analog/Mixed-Signal Circuits	NSF	\$450K	\$225K	2015-2018
PI: Nanshu Lu (Aerospace); co-PI: Nan Sun	Stretchable Planar Antenna Modulated by Integrated Circuit for the Near Field Communication of Epidermal Electrophysiological Sensors	NSF	\$380K	\$190K	2015-2018
Sub-award PI: Nanshu Lu (Aerospace); Sub-award co-PI: Nan Sun; PI: Katherine Steele (University of Washington)	Ubiquitous rehabilitation to monitor and improve muscle activity and movement after neurologic injury	NIH	\$1.5M total, \$370K sub-award total	\$185K	2015-2019
PI: Nan Sun	CAREER: Combining nuclear magnetic resonance with IC technology	NSF	\$400K	\$400K	2013-2018
PI: Nan Sun	High temperature LNA design	COSL	\$75K	\$75K	2015
PI: Nan Sun	Low-power high-speed ADC for CMOS image sensor	Samsung	\$100K	\$100K	2015
PI: Nan Sun	Multichannel MRI transceiver design	Samsung	\$100K	\$100K	2014
PI: Nan Sun	Miniature NMR systems for rock and outcrop analysis	Formation Evaluation Industry Consortium	\$105K	\$105K	2011-2014
PI: Nan Sun	Gift for student design	Texas	\$20K	\$20K	2011-

	contest	Instruments			2015
PI: Nan Sun	Gift	Texas Instruments	\$60K	\$60K	2015
PI: Nan Sun	Gift	Texas Instruments	\$60K	\$60K	2014
PI: Nan Sun	Gift	Texas Instruments	\$60K	\$60K	2013
PI: Nan Sun	Gift	Cirrus Logic	\$20K	\$20K	2016
PI: Nan Sun	Gift	Cirrus Logic	\$20K	\$20K	2014
PI: Nan Sun	Gift	Cirrus Logic	\$20K	\$20K	2013
PI: Nan Sun	Gift	Cirrus Logic	\$20K	\$20K	2012
PI: Nan Sun	Gift	Intel	\$18K	\$18K	2012
PI: Nan Sun	Gift	Intel	\$30K	\$30K	2011
TOTAL			\$3.4M	\$1.7M	

Table 3. External In-Kind Donations (Total Market Value ≈ \$0.7M; My Share ≈ 0.5M)

	Free Integrated Circuit (IC) Fabrication	Company	Donation in Value	Candidate's Share	Year
Lead PI	4 mm ² free IC fabrication in 130nm	MOSIS	\$20K	\$10K	2016
Lead PI	Twice 9 mm ² free IC fabrication in 40nm	TSMC	\$180K	\$180K	2016
Lead PI	Twice 25 mm ² free IC fabrication in 180nm	TSMC	\$60K	\$60K	2016
Lead PI	16 mm ² free IC fabrication in 130nm	MOSIS	\$75K	\$37.5K	2015
Lead PI	Twice 9 mm ² free IC fabrication in 40nm	TSMC	\$90K	\$90K	2015
Lead PI	25 mm ² free IC fabrication in 180nm	TSMC	\$30K	\$30K	2015
Lead PI	16 mm ² free IC fabrication in 130nm	MOSIS	\$75K	\$37.5K	2015
Single PI	1 mm ² free IC fabrication in 65nm	Texas Instruments	\$10K	\$10K	2014
Single PI	1 mm ² free IC fabrication in 65nm	Samsung	\$10K	\$10K	2014
Lead PI	16 mm ² free IC fabrication in 130nm	MOSIS	\$75K	\$37.5K	2014
Lead PI	16 mm ² free IC fabrication in 130nm	MOSIS	\$75K	\$37.5K	2013
Lead PI	16 mm ² free IC fabrication in 130nm	MOSIS	\$75K	\$37.5K	2012
Total			\$0.7M	\$0.5M	

Division of Labor – Research Projects

Nan Sun
 Electrical and Computer Engineering
 The University of Texas at Austin
 nansun@mail.utexas.edu

The division of labor for research projects/grants while in rank is provided in the table below. Only collaborative projects are listed (3 of 18). The full list of awarded grants is available in my CV and research statement.

Co-Investigators	Division of Labor	Title	Agency	Project Total	Candidate Share
PI: Nan Sun David Pan (Co-PI) ECE	NS 50% effort, DP 50% effort	SHF: Small: Design/Automation for Synthesizable and Scaling Friendly Analog/Mixed-Signal Circuits	NSF	\$450K	\$225K
Co-PI: Nan Sun Nanshu Lu (PI) Aerospace	NS 50% effort, NL 50% effort	Stretchable Planar Antenna Modulated by Integrated Circuit (SPAMIC) for the Near Field Communication (NFC) of Epidermal Electrophysiological Sensors (EEPS)	NSF	\$380K	\$190K
Co-PI: Nan Sun Nanshu Lu (PI) Aerospace	NS 50% effort, NL 50% effort	Ubiquitous rehabilitation to monitor and improve muscle activity and movement after neurologic injury	NIH	\$370K (sub-award total)	\$185K

EXHIBIT 56

THE UNIVERSITY OF TEXAS AT AUSTIN

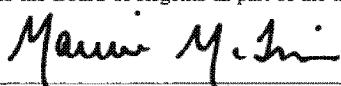
Date: 9/13/16

RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS

Name: Janapa Reddi, Vijay EID: vi239 Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2016-17 in each count*):At UT Austin since: 9/1/2011 (month/day/year) Total Years at UT Austin: 6In Present Rank since: 9/1/2011 (month/day/year) Total Years in Present Rank: 6*Tenure-track only:*Number of Years in Probationary Status: 5Additional information: Probationary Extension 2015-16Primary Department: Electrical and Computer EngineeringCollege/School: Engineering, Cockrell School ofJoint Department: N/ACollege/School: N/AOther Department(s): N/ARecommendation actions¹:By Budget Council/Executive Committee: PromoteVote² for promotion 31; Against 1; Abstain 2; Absent 0; Ineligible to vote 1By Department Chair: PromoteBy College/School Advisory Committee: PromoteVote² for promotion 7; Against 0; Abstain 0; Absent 0; Ineligible to vote 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2017

(To be submitted to the Board of Regents as part of the annual budget.)

By: _____



For the President

Date: December 15, 2016¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of committee members ineligible to vote should also be recorded. Enter zero where it would otherwise be blank.

Dean's Assessment

Vijay Janapa Reddi

Department of Electrical and Computer Engineering
Cockrell School of Engineering

Dr. Vijay Janapa Reddi received his BS in Computer Engineering from Santa Clara University in 2003, his MS in Electrical and Computer Engineering from the University of Colorado at Boulder in 2006, and his PhD in Computer Science from Harvard University in 2010. Dr. Janapa Reddi worked for one year as a senior design engineer at Advanced Micro Devices, and he joined the Department of Electrical and Computer Engineering (ECE) at the University of Texas at Austin (UT) in September 2011. If successfully promoted to associate professor in September 2017, he will have accumulated five years of probationary service.

This is not an up-or-out case because the 2015-16 academic year did not count toward Dr. Janapa Reddi's probationary service. The department decided to put the case forward one year prior to the mandatory review following a budget council vote in early spring.

Nine external letters were submitted as part of the promotion dossier, of which, five writers were nominated by Dr. Janapa Reddi, and four were selected by the budget council. Seven letter writers are faculty members at universities in the US: Cornell, Princeton, Georgia Tech, Penn State, Stanford, Michigan, and Illinois. One letter writer is a faculty member in Switzerland (Swiss Federal Institute of Technology in Zurich), and one heads the Chrome Cloud Team for Google. Both are former faculty members in the US.

Teaching

Dr. Janapa Reddi's teaching has primarily been in the area of computer engineering with a focus on architecture and embedded systems. During his time in rank, he has taught a total of 223 students in three different courses: EE 319K, *Introduction to Embedded Systems*, a required undergraduate course (taught two times); EE 382V, *Dynamic Compilation*, a graduate course (taught three times); and EE 382V, *Code Generation and Optimization*, a graduate course (taught two times).

Dr. Janapa Reddi's overall average undergraduate instructor rating of 4.35 is higher than the corresponding values for assistant professors in ECE (4.21) and assistant professors in the Cockrell School (4.17). At the graduate level, Dr. Janapa Reddi's overall instructor rating is 4.32, which is slightly less than the average for assistant professors in ECE (4.43) and near the average for assistant professors in the Cockrell School (4.34).

Senior faculty conducted peer evaluations in Dr. Janapa Reddi's courses four times – twice at the undergraduate level and twice at the graduate level. The feedback was positive, but he received multiple suggestions to slow the pace of his presentation and engage the students more during his lectures.

Research

Dr. Janapa Reddi's research encompasses both computer science and computer engineering disciplines. At UT, his research has focused on combined software/hardware engineering solutions for energy-efficient mobile web browsing and development of approaches to monitor and mitigate the effects of voltage noise in various graphical processing unit (GPU) and central processing unit (CPU) architectures. The rapidly increasing use of mobile devices and web-related applications has attracted substantial interest within both academia and industry in Dr. Janapa Reddi's work.

Because the projected use of mobile devices in both the developed and developing world over the coming years is expected to increase substantially, the impact of Dr. Janapa Reddi's work in this area is expected to grow and draw greater attention. Highlights of Dr. Janapa Reddi's research include:

- 20 peer-reviewed conference proceedings (34 total) and two archived refereed journal publications (8 total) in rank. One of his students is the lead author for 12 of the conference proceedings and both journal papers.
- Six of his peer-reviewed conference papers in rank are published in the highly competitive conference proceedings High Performance Computer Architecture (HPCA) or International Symposium on Computer Architecture (ISCA)
- An h-index of 19 (Google Scholar), with 4,220 career citations. One paper describing the Pin tool, which he developed as a graduate student at Colorado, has been cited more than 2,600 times.

While in rank, Dr. Janapa Reddi has secured a total of \$2.4 million in external research funding, of which approximately \$1.8 million is his share. Dr. Janapa Reddi is the PI on four grants from the National Science Foundation (NSF) totaling nearly \$1.4 million, of which his share is approximately \$1.0 million. He has also secured over \$1.0 million in research funding from industry (Google, Intel, AMD, Samsung, and the Semiconductor Research Corporation), of which his share exceeds \$0.8 million.

All nine letters enthusiastically support the promotion of Dr. Janapa Reddi. Many of the referees cite not only his multiple outstanding research achievements, in both computer hardware and software, but also note his unusually high level of creativity and productivity. The referees note that Dr. Janapa Reddi's contributions are not only broadly impacting thinking in computer science and engineering, but are also being incorporated by multiple companies.

David I. August¹ (Princeton) comments, "Dr. Janapa Reddi has already significantly influenced the thinking of and methods used by others in my field." August states "Dr. Janapa Reddi's work has received more academic recognition than the majority of researchers in our field have received in total." August notes the broad nature of Dr. Janapa Reddi's impact in both computer science and engineering and cites his work in tool development (Pin and GPUWattch) and his pioneering work in handling hardware voltage emergencies; he explains "Dr. Janapa Reddi has pioneered the effort ... handling voltage emergencies using a software-assisted, hardware-guaranteed approach." In comparing Dr. Janapa Reddi to peer-level assistant professors across the nation, August writes "... he ranks in the top two in terms of research creativity, productivity, and impact." August concludes his letter by writing, "I am sure that he would be granted tenure at Princeton University ... this tenure case is a "no brainer."

Scott A. Mahlke² (Michigan) writes that Dr. Janapa Reddi has had a "... profound impact creating tools that are seamlessly used by students, faculty, and engineers in the computer systems community." Mahlke notes that one "version of [his] technology is being integrated into Samsung's Tizen OS." Mahlke says that Dr. Janapa Reddi is a "trend setter rather than a follower." Mahlke concludes with, "He is clearly over the bar for promotion and tenure, and I strongly urge you to do your best to keep him at Texas."

¹ Professor of Computer Science

² Professor of Electrical Engineering and Computer Science

Chita R. Das³ (Penn State) remarks “Vijay is internationally known for his research accomplishments in the broad area of computer architecture.” Das notes that Janapa Reddi is a “pioneer in ... designing energy-efficient mobile architectures” and that “[his] wimpy core concept has been adopted in several commercial datacenter designs.” Das writes that Janapa Reddi’s “... research record is simply outstanding” and that he is “one of the best researchers among his peers.” Das believes that Janapa Reddi would have “no problem in getting promotion and tenure at Penn State and for that matter in any major school.”

David H. Albonesi⁴ (Cornell) writes that “Professor Janapa Reddi is a rising star in the computer architecture community” and that he “... has an unusually broad area of impact.” Regarding his contributions to the peer-reviewed literature, he notes Janapa Reddi has “... published two papers in ISCA, five in MICRO, and three in HPCA ... more prestigious and competitive than journals ... Overall, this is an outstanding record of achievement.” Albonesi notes “The only possible perceived weakness in Professor Janapa Reddi’s case might be the lack of an NSF CAREER Award, but I do not consider this a necessary condition for tenure, and the TCCA Young Computer Architect Award more than makes up for it.” Albonesi concludes by stating that Janapa Reddi “... would receive tenure here at Cornell.”

Advising and Student Mentoring

Dr. Janapa Reddi is currently supervising six PhD students, two of whom have successfully defended and will submit their dissertations to the Graduate School before the deadline for graduation in December. He has also graduated two MS students. Dr. Janapa Reddi has mentored three undergraduate students who worked in his laboratory. He has also hosted fireside chats with Eta Kappa Nu (HKN), the electrical and computer engineering honor society.

University Service

Dr. Janapa Reddi has served on two faculty recruiting committees, and he serves as a bridge linking UT students with industry (e.g., Intel) for internships. Dr. Janapa Reddi has conducted the Hands-on Computer Science (HaCS) program for Austin Independent School District (via UT Outreach).

Professional Service

Dr. Janapa Reddi is serving as the general chair for the 2017 International Symposium on Code Generation and Optimization. He served as the finance chair for the same conference in 2015. While in rank, Dr. Janapa Reddi has participated in nine program committees at various meetings, including the prestigious IEEE High Performance Computer Architecture Symposium and the ACM/IEEE International Symposium on Computer Architecture. In 2014, he served as a program chair for International Symposium on Code Generation and Optimization. Dr. Janapa Reddi has served as a guest editor for two special issues of *IEEE Micro*.

Other Evidence of Merit or Recognition

While in rank, Dr. Janapa Reddi has received multiple awards that recognize his contributions in computer science and engineering. In 2016, he received the Young Computer Architect Award from the Technical Committee on Computer Architecture within the IEEE Computer Society. This award recognizes one individual a year “who has made an outstanding, innovative research contribution or contributions to Computer Architecture.” Also in 2016, he gave one of four Gilbreth Lectures during the National Academy of Engineering National Meeting in Irvine, CA. In 2014, Janapa Reddi was invited to participate in the NAE sponsored Indo-American Frontiers of Engineering in Mysore,

³ Professor of Computer Science and Engineering

⁴ Professor of Electrical and Computer Engineering

India. In 2013, Janapa Reddi received an Intel Early Career Award. The award recognizes assistant professors who show great promise as future academic leaders in disruptive computing technologies. He and his students have also received several best paper awards at conferences.

Overall Assessment

Dr. Janapa Reddi has established himself as one of the leading young academics working at the intersection of computer science and computer engineering. His record of teaching is solid. He has established a sustainable research program with funding from the National Science Foundation and various sources in industry. His work in energy efficient web-based mobile applications is widely recognized in both industry and academia. He has presented and published his research at the leading conferences and symposia in his field, at major companies in the industry, and at a number of peer academic institutions. He has received numerous honors and recognition for the work he has completed while at UT. Dr. Janapa Reddi has developed a national standing and is widely recognized as a young emerging leader in computer science and engineering.

Overall, I believe that Dr. Janapa Reddi's performance meets or exceeds expectations for promotion to associate professor with tenure in all categories, and I support this case without reservation.



Sharon L. Wood, Dean
17 October 2016

Vijay Janapa Reddi
 Department of ECE
Course Rating Averages

What source was used to complete this chart? My CIS

Course Number: EE319K (Introduction to Embedded Systems)

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Fall 2016	68	35	4.3	4.0
Spring 2014	72	37	4.4	4.2
Mean	70	36	4.4	4.1

Course Number: EE382V (Code Generation and Optimization)

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Fall 2013	29	26	4.4	4.0
Fall 2012	16	13	4.5	4.2
Mean	23	20	4.5	4.1

Course Number: EE382V (Dynamic Compilation)

Semester	Class Size	Number of Responses	Instructor Rating	Course Rating
Fall 2014	15	12	4.3	4.1
Spring 2013	8	8	4.4	4.1
Spring 2012	21	19	4.0	3.4
Mean	15	13	4.2	3.9

Vijay Janapa Reddi

Table 1. Research Summary

Metric	Value
Peer-reviewed journal publications (in rank <i>and total</i>)	4 / 9
Peer-reviewed conference proceedings (in rank <i>and total</i>)	19 / 33
Number of <i>journal</i> papers <i>in rank</i> with UT students as <i>co-authors</i>	2
Total citations of all publications (career) <i>from ISI Web of Knowledge</i>	333
h-index (career) <i>from ISI Web of Knowledge</i> *	7
Total citations of all publications (career) <i>from Google Scholar or Publish or Perish</i>	4220
h-index (career) <i>from Google Scholar or Publish or Perish</i> *	19
Total external research funding raised	\$2,403,959
Total external research funding raised (candidate's share)	\$1,810,670
Total number of external grants/contracts <i>awarded</i>	7
Number of external grants/contracts <i>awarded</i> as PI	5

Note:

- * Provide a printout/screen shot of the first page of the report from both *ISI Web of Knowledge* and *Google Scholar*

Table 2. External Grants and Contracts Awarded while in Rank

Grants and Contracts

PI/Co-PI	Title	Agency	Grant Period	Total/ My Share
PI Janapa Reddi (self)	High-Performance, Energy-Efficient Mobile Web Computing	National Science Foundation	06/01/2016 - 05/31/2019	\$400,000/ \$400,000
PI Chris Kim (Univ. of Minnesota)/ Co-PI Janapa Reddi	Second Phase of Circuit and Architecture Co-Design for Near Threshold Voltage-Based Mobile Application Processors	Univ. of Minnesota (subcontract)	04/10/2015 - 01/10/2016	\$100,000/ \$43,500
PI Janapa Reddi/ Co-PI Chris Kim (Univ. of Minnesota)	Feedback-Driven Resiliency for Near-Threshold Systems: under SRC MAG (201300745-001;2013-HJ-2408 MAG)	Semiconductor Research Corporation	04/01/2013 - 03/31/2017	\$128,000/ \$64,000
PI Chris Kim (Univ. of Minnesota)/ Co-PI Janapa Reddi	Circuit and Architecture Co-Design for Near Threshold Voltage-Based Mobile Application Processors	Univ. of Minnesota (subcontract)	12/15/2013 - 01/15/2015	\$100,000/ \$43,500

PI Janapa Reddi/ Co-PI Sek Chai (SRI)	Resilient Computing Systems Using Deep Learning Techniques	National Science Foundation	08/01/2015 - 07/31/2018	\$499,959/ \$265,000
PI Janapa Reddi/ Co-PI Chris Kim (Univ. of Minnesota)	Feedback-driven resiliency for Near Threshold Systems	National Science Foundation	04/01/2013 - 03/31/2016	\$192,000/ \$96,000
PI Janapa Reddi/ Co-PI Lizy John (UT Austin)	Cross-Layer Solutions for Sustainable and Reliable Computing Solutions	National Science Foundation	08/01/2012 - 07/31/2015	\$300,000/ \$214,670

Industry Gifts

PI/Co-PI	Title	Agency	Grant Period	Grant Total
PI Janapa Reddi (self)	Mobile computing	Google	2012, 2013, 2015	\$139,000
PI Janapa Reddi (self)	Reliability and Mobile Computing	Intel	2012, 2013, 2015, 2016	\$395,000
PI Janapa Reddi (self)	Power modeling	AMD	2012, 2013, 2014, 2015	\$150,000

Total Funding: \$2,403,959

My Total Funding: \$1,810,670

Note:

- † For all projects, list the role of the candidate. For projects with co-investigators, also list name, role (PI or Co-PI), and department (university if not UT) for each co-investigator.

Division of Labor - Research Projects

Vijay Janapa Reddi

The division of labor for research projects/grants while in rank is provided in the table below. Only collaborative projects are listed. The complete list of all awarded grants is present in my CV.

<u>Grants and Contracts</u>		Agency	Division of Labor	Total/ My Share
PI/Co-PI	Title			
PI Janapa Reddi (self)	High-Performance, Energy-Efficient Mobile Web Computing	National Science Foundation	VJ: 100%	\$400,000/\$400,000
PI Chris Kim (Univ. of Minnesota)/ Co-PI Janapa Reddi	Second Phase of Circuit and Architecture Co-Design for Near Threshold Voltage-Based Mobile Application Processors	Univ. of Minnesota (subcontract)	CK: 50% VJ: 50%	\$100,000/\$43,500 (I was responsible for the architecture piece of the work, while Chris was responsible for the circuits part)
PI Janapa Reddi/ Co-PI Chris Kim (Univ. of Minnesota)	Feedback-Driven Resiliency for Near-Threshold Systems: under SRC MAG (201300745-001;2013-HJ-2408 MAG)	Semiconductor Research Corporation	VJ: 50% CK: 50%	\$128,000/\$64,000 (the project was on circuit and architecture co-design. I was responsible for the architecture half of the proposal)
PI Chris Kim (Univ. of Minnesota)/ Co-PI Janapa Reddi	Circuit and Architecture Co-Design for Near Threshold Voltage-Based Mobile Application Processors	Univ. of Minnesota (subcontract)	VJ: 50% CK: 50%	\$100,000/\$43,500 (the project was on

			circuit and architecture co-design, specifically for mobile NTV processors. I was responsible for the architecture half of the proposal)	
PI Janapa Reddi/ Co-PI Sek Chai (SRI)	Resilient Computing Systems Using Deep Learning Techniques	National Science Foundation	VJ: 53% SC: 47%	\$499,959/ \$265,000
PI Janapa Reddi/ Co-PI Chris Kim (Univ. of Minnesota)	Feedback-driven resiliency for Near Threshold Systems	National Science Foundation	VJ: 50% CK: 50%	\$192,000/ \$96,000

(I was responsible for the resilient architecture piece of the project, while Sek was helping my students with machine learning methods)

(same as previous proposals with Chris, I was responsible for the architecture piece while Chris handled the circuits part of the research)

PI Janapa Reddi/ Co-PI Lizy John (UT Austin)	Cross-Layer Solutions for Sustainable and Reliable Computing Solutions	National Science Foundation	VJ: 70% LJ: 30%	\$300,000/ \$214,670
			(I led the vast majority of this research. More specifically, I did the measureme nt based research with my students that led to publishable material and a PhD thesis.	Dr. John and I originally explored simulation based analysis on a novel idea with one MS student that was mostly a dead-end.

EXHIBIT 57

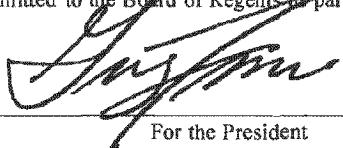
THE UNIVERSITY OF TEXAS AT AUSTIN

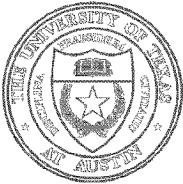
Date: 09/17/2014**RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS**Name: Georgios-Alex (Alexandros G.) Dimakis EID: gd6366 Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2014-15 in each count*):At UT Austin since: 01/16/2013 In Present Rank: 2.50 In Probationary Status (TT only): 2
(month/day/year) (# of years) (# of full years or N/A)Primary Department: Electrical and Computer Engineering College/School: Cockrell School of EngineeringJoint Department: - College/School: -Other Department(s): -Recommendation actions¹:By Budget Council/Executive Committee: PromoteVote² for promotion 31; Against 0; Abstain 3; Absent 1; Ineligible to vote 0By Department Chair: Promote

Vote for promotion _____; Against _____; Abstain _____; Absent _____

By College/School Advisory Committee: PromoteVote for promotion 7; Against 0; Abstain 0; Absent 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2015

(To be submitted to the Board of Regents as part of the annual budget.)

By:  Date: December 17, 2014
For the President¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of budget council/executive committee members ineligible to vote due to rank should also be recorded. Enter zero where it would otherwise be blank.



**THE UNIVERSITY OF TEXAS AT AUSTIN
COCKRELL SCHOOL OF ENGINEERING**

Office of the Dean • 301 E. Dean Keeton Street, C 2100 • Austin, Texas 78712-2100

Dean's Assessment

Alex Dimakis

Department of Electrical and Computer Engineering

Alex Dimakis completed a Diploma in Electrical and Computer Engineering from the National Technical University of Athens in 2003. He subsequently received an MS (2005) and a PhD (2008) in Electrical and Computer Engineering from the University of California, Berkeley. He was a post-doctoral scholar at the California Institute of Technology for one year. Dr. Dimakis was then appointed as an assistant professor at the University of Southern California, where he served on the faculty for three and a half years (May 2009 to December 2012). He joined the Department of Electrical and Computer Engineering at the University of Texas at Austin as an assistant professor in January 2013. He has been at his current rank at UT Austin for one and a half years. This case is considered to be early if only the time at UT is considered. However, if this case is successful and if his time at USC is considered, Dr. Dimakis will have served as an assistant professor for a total of six years.

A total of ten external review letters were received, of which five were from reviewers selected by the budget council and five were recommended by the candidate. The letter writers are all experts in the field of coding theory and communications and were chosen from domestic peer institutions (Stanford, UC Berkeley, UC San Diego, Duke, and Maryland), industry (Bell Labs), and international universities (Indian Institute of Science, Toronto, Chinese University of Hong Kong, École Polytechnique Lausanne). One referee is a member of the National Academy of Engineering.

Teaching

During his time at UT Austin, Dr. Dimakis taught one undergraduate course (EE 313, *Linear Systems and Signals*, twice) and one graduate course (EE 381V, *Advanced Coding Theory*, once). He also taught four graduate level courses at the University of Southern California. These courses were on coding theory, advanced coding and information theory, probability, and message passing theory.

Based on student comments and peer evaluations, it can be concluded that Dr. Dimakis is an excellent teacher. His undergraduate instructor ratings range from 4.0 to 4.4. The 5-year average instructor rating for assistant professors in the Cockrell School of Engineering is 4.1. Dr. Dimakis' teaching performance is therefore better than the CSE average scores. His average course rating for EE 313 is 3.90. His instructor rating in the graduate course is 4.6, which exceeds the average for assistant professors in the Cockrell School (4.08). His average course rating for EE 381V is 4.47. Dr. Dimakis' instructor ratings at USC ranged between 4.4 and 4.8 on a 5-point scale.

The peer assessment of Dr. Dimakis' teaching emphasizes his energetic teaching style and his ease of communication and is consistent with positive student comments the candidate has received in his courses.

Research

Dr. Dimakis' research is in the areas of information theory, coding theory, machine learning and networking. He has made important contributions to the theory and implementation of distributed storage codes especially to solve problems encountered when erasure codes are used to protect information stored in a distributed manner over multiple machines in a data center. Dr. Dimakis has continued the trend-setting research in the area of distributed storage that he started at USC and during his time at UT Austin has made forays into other areas such as the analysis of gossip algorithms and exploring the connection between linear programming (LP) based decoding of binary codes and compressed sensing.

Dr. Dimakis has published ten papers at UT Austin, and a total of 25 papers in-rank when his time at USC is included. Over his entire career, he has published 29 journal publications. Most of his publications are in various *IEEE Transactions* which are acknowledged to be among the most prestigious in his field. He has also written 44 refereed conference papers while in rank, of which twelve were presented during the time Dr. Dimakis has been at UT Austin. Over his career, he has published 60 papers in refereed conference proceedings. A number of his publications are with graduate students both here at UT Austin and at USC.

Some of his research highlights include: (1) Dr. Dimakis' publications have been cited 3632 times with an h-index of 30 (Google scholar) since 2009. The budget council presented a comparison of Dr. Dimakis' research productivity to other recently promoted faculty members, which indicates that Dr. Dimakis is more productive and better cited than any of the members of the comparison group. (2) Dr. Dimakis has been invited to give several talks at universities and symposia. He was the keynote speaker at the IEEE International Symposium on Network Coding. He was invited to make a presentation at the Network Information Theory meeting at the Banff International Research Station.

Dr. Dimakis has received funding from eleven research grants over the course of his career and is the PI on eight of those grants. He has been awarded seven research grants during his time at UT Austin and is the PI on five of those. He has raised over \$3.4 million in research funding over the course of his career with his share at \$1.8 million. His share of research funding while at UT Austin is approximately \$1.1 million. Prominent research grants include the NSF CAREER award that he received when he was at USC, a Google Research Award that he received in 2012, and a prestigious Young Investigator Award from the Army Research Office (ARO). He has three other awards from NSF. Dr. Dimakis' research is of direct relevance to organizations that are engaged in big data analytics using clusters and cloud storage systems and this is likely to sustain his research program for a long time. In the words of Raymond Yeung (Chinese Univ. of Hong Kong), "*the technology developed by Dr. Dimakis and his students/co-workers has the potential to become the core technology for next generation cloud storage.*"

Dr. Dimakis received exceptionally strong reviews from all the letter writers. Some select comments are presented below:

Dr. Venkatachalam Anantharam (UC Berkeley) writes, "his research in coding for distributed systems has set a veritable hailstorm of research: there are already conferences devoted purely to distributed data storage, and there are many groups around the world working on this topic."

Dr. Alexander Barg (Maryland) writes, "The works of Dr. Dimakis in this area have had a significant impact on the development of coding theory: it is fair to say that to some extent they have shaped subsequent research devoted to coding for data centers."

Dr. Robert Calderbank (Duke, NAE), "If I were to ask a two part question - What was the idea and what difference did it make? – then I would find it difficult to rank anyone ahead of Alex."

Dr. Rüdiger Urbanke (École Polytechnique Fédérale de Lausanne) writes, "Together with some of his colleagues he has created a whole new branch of coding theory that takes into account the unique requirements of this field. This has led to the definition of a research area that is at the same time very beautiful and eminently useful. This does not happen every day!"

Advising and Student Mentoring

Dr. Dimakis graduated one PhD student at UT and one co-supervised PhD student at USC. He also graduated one MS student at UT and three at USC. He is currently the sole supervisor of two PhD students and co-supervisor of two others (two additional PhD students joined his group in September 2014). While in rank, he has also formally supervised a senior design team comprising five ECE undergraduate students. He also co-supervised an

undergraduate student researcher from Rice University. Dr. Dimakis currently supervises two post-doctoral research fellows.

University Service

Dr. Dimakis has served as a member of the ECE Semester Course Evaluation Committee and the CommNetS Pre-Qual Screening Committee for 2014. He has also served on the CommNetS Graduate Admissions Committee for 2013 and 2014. The Budget Council statement observes that service on the Graduate Admissions Committee is a particularly time-consuming commitment. In 2013, he served as program chair of the Winedale Workshop, a one-day event co-organized by UT Austin, Rice University and Texas A&M to facilitate interaction between Texas researchers in the area of signals, systems and communications.

Professional Service

Dr. Dimakis is an associate editor of the IEEE *Signal Processing Letters*. He has served on over 15 technical program committees for key conferences in his area (such as ISIT). He has also chaired an IEEE workshop on Emerging Data Storage Technologies in 2012, participated in two workshops sponsored by NSF. Recently, Dr. Dimakis was appointed to the eight member committee that is investigating future directions in information theory. He has served on several funding/review panels for NSF and other international academic organizations. He has reviewed papers for virtually all the top IEEE journals pertinent to his area.

Other Evidence of Merit or Recognition

Dr. Dimakis received the Joint Paper Award in 2012 from the IEEE Communications Society and the IEEE Information Theory Society. This is a very prestigious award, with only one paper per year recognized across a wide diversity of journals in the two IEEE societies. He delivered the keynote address at the 2010 IEEE International Symposium on Network Coding. He received a NSF CAREER Award in 2012 and an Army Research Office Young Investigator Award in 2014. He was invited as a school lecturer at the European School of Information Theory.

Overall Assessment

Dr. Dimakis is clearly an outstanding researcher who has continued down the path he set at USC and has established a strong research program here at UT. He is engaged in trend-setting research in the area of coding for distributed systems, gossip algorithms, LP decoding and machine learning. He has excelled at teaching and has been complimented by the students for being patient, energetic and an excellent communicator. He has received several prestigious awards that recognize his research credentials. He has performed adequate service to the university and department and has maintained an active role in his profession by serving as the associate editor of the *IEEE Signal Processing Letters*.

I believe that Dr. Dimakis meets or exceeds all expectations for early promotion to associate professor, and support this case without reservation.



Sharon L. Wood, Dean
8 November 2014

Candidate's Statement on Research

Table 1. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	25
Peer Reviewed Conference Proceedings Publications in Rank	44
Total Citations of all Publications (Google Scholar)	3600
h-index (Google Scholar)	30
Research Funding Raised (\$) (Candidate Share)	\$3,444,279 (\$1,792,500)
Total Grants/Contracts Received	11
PI on Grants/Contracts Received	8

Table 2. Grants and Contracts Awarded while in Rank

Co-Investigators	Title	Agency	Grant Total	Grant Period
Krishnamachari (USC) (Dimakis Co-PI)	Efficient Storage in Vehicular Networks, (Research contract with USC)	General Motors	\$ 98,000 (\$ 39,000)	09/2010-9/2011
(none) (Dimakis PI)	CAREER: Network Coding Theory for Distributed Storage	National Science Foundation (NSF)	\$ 470,000 (\$ 470,000)	2/2011-1/2016
Caire, Molisch (USC) (Dimakis Co-PI)	D2D Wireless Video: Breaking the Cellular Capacity Bottleneck for Efficient Video Delivery	Intel and Cisco	\$ 300,000 (\$ 100,000)	1/2011-1/2014
Krishnamachari (USC) (Dimakis Co-PI)	Cloud Content Management in Vehicular Networks, (Research contract with USC)	General Motors	\$ 100,000 (\$ 50,000)	10/2011-9/2012
Ramchandran (UC Berkeley) (Dimakis PI)	Workshop Proposal: Communication Theory and Signal Processing in the Cloud Era	National Science Foundation (NSF)	\$ 39,279 (\$ 19,500)	06/2012
(none) (Dimakis PI)	Coding for Big Data	Google Faculty Research Award	\$ 60,000 (\$ 60,000)	7/2012
Pfister (Texas A&M, PI) (Dimakis, UT, PI)	CIF: Small: Collaborative Research: Design and Analysis of Novel Compressed Sensing Algorithms via Connections with Coding Theory	National Science Foundation (NSF)	\$ 470,000 (\$ 217,000)	9/2012-8/2015

joint with Continuum Analytics (Dimakis PI)	Data-Parallel Analytics on Graphics Processing Units (GPUs)	DARPA STTR Grant	\$ 100,000 (\$ 30,000)	06/2014 - 11/2014
Viswanath (UIUC, Lead PI), Ramchandran (UC Berkeley, PI) Muriel Medard (MIT, PI) Hajek (UIUC, Co-PI) Srikant (UIUC, Co-PI) (Dimakis, UT, PI)	CIF: Medium: Collaborative Research: Content Delivery over Heterogeneous Networks: Fundamental Limits and Distributed Algorithms	National Science Foundation (NSF)	\$ 1,200,000 (\$ 200,000)	8/2014 - 8/2017
(none) (Dimakis PI)	YIP: Learning Network Properties through Low Rank Approximations	Army Research Office (ARO)	\$ 150,000 (\$ 150,000)	09/2014 - 08/2017
(none) (Dimakis PI)	CIF: Small: Sparsity in Quadratic Optimization through Low-Rank Approximations	National Science Foundation (NSF)	\$ 425,000 (\$ 425,000)	09/01/2014 - 08/31/2017
(none)	WNCG Affiliates Program + Small research gifts	Several industrial affiliates	\$ 32,000 (\$ 32,000)	2009-2013
		Total	\$3,444,279	
		My Share	(\$1,792,500)	

Division of Labor- Research Projects

Alex Dimakis

Department of Electrical and Computer Engineering, The University of Texas at Austin
dimakis@austin.utexas.edu

This document identifies the division of labor for research projects/grants while in rank. Only collaborative research projects are listed.

Co-Investigators	Division of Labor	Title	Agency	Grant Total	Grant Share	Grant Period
Krishnamachari (PI), Dimakis (Co-PI)	BK 50% effort AGD 50% effort	Efficient Storage in Vehicular Networks, (Research contract with USC)	General Motors	\$98,000	\$39,000	09/2010-9/2011
Caire (PI), Molisch (Co-PI), Dimakis (Co-PI)	GC 34% effort AFM 33% effort AGD 33% effort	D2D Wireless Video: Breaking the Cellular Capacity Bottleneck for Efficient Video Delivery	Intel and Cisco	\$300,000	\$100,000	1/2011-1/2014
Krishnamachari (PI), Dimakis (Co-PI)	BK 50% effort AGD 50% effort	Cloud Content Management in Vehicular Networks, (Research contract with USC)	General Motors	\$100,000	\$50,000	10/2011-9/2012
Ramchandran (PI), Dimakis (PI)	KR 50% effort AGD 50% effort	Workshop Proposal: Communication Theory and Signal Processing in the Cloud Era	National Science Foundation (NSF)	\$39,279	\$19,500	6/2012
Pfister (PI), Dimakis (PI)	HP 50% effort AGD 50% effort	CIF: Small: Collaborative Research: Design and Analysis of Novel Compressed Sensing Algorithms via Connections with Coding Theory	National Science Foundation (NSF)	\$470,000	\$217,000	9/2012-8/2015
Viswanath (PI), Hajek (Co-PI), Srikant (Co-PI), Ramchandran (PI), Medard (PI), Dimakis (PI)	AGD 17% effort, rest of team 83% effort	CIF: Medium: Collaborative Research: Content Delivery over Heterogeneous Networks: Fundamental Limits and Distributed Algorithms	National Science Foundation (NSF)	\$1,200,000	\$200,000	8/2014-8/2017

EXHIBIT 58

THE UNIVERSITY OF TEXAS AT AUSTIN

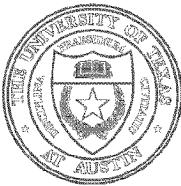
Date: 09/05/2014**RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS**Name: Todd Humphreys EID: th9536 Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2014-15 in each count*):At UT Austin since: 09/01/2009 In Present Rank: 6.00 In Probationary Status (TT only): 6
(month/day/year) (# of years) (# of full years)Primary Department: Aerospace Engineering and Engineering Mechanics College/School: Cockrell School of EngineeringJoint Department: - College/School: -Other Department(s): Applied Research LaboratoriesRecommendation actions¹:By Budget Council/Executive Committee: PromoteVote² for promotion 21; Against 0; Abstain 0; Absent 1; Ineligible to vote 0By Department Chair: PromoteBy College/School Advisory Committee: PromoteVote for promotion 6; Against 1; Abstain 0; Absent 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2015

(To be submitted to the Board of Regents as part of the annual budget.)

By: Todd Humphreys Date: December 17, 2014

For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of budget council/executive committee members ineligible to vote due to rank should also be recorded. Enter zero where it would otherwise be blank.



THE UNIVERSITY OF TEXAS AT AUSTIN
COCKRELL SCHOOL OF ENGINEERING

Office of the Dean • 301 E. Dean Keeton Street, C 2100 • Austin, Texas 78712-2100

Dean's Assessment

Todd E. Humphreys

Department of Aerospace Engineering and Engineering Mechanics

Todd Humphreys received his BS and MS degrees in Electrical and Computer Engineering from Utah State University in 2000 and 2003, respectively, and a PhD degree in Aerospace Engineering from Cornell University in 2008. Following graduation, Dr. Humphreys served as a researcher and co-founder of Coherent Navigation for one year before beginning his tenure-track appointment as assistant professor in the Department of Aerospace Engineering and Engineering Mechanics at the University of Texas in Austin in August 2009. If successfully promoted to associate professor, Dr. Humphreys will have served in the rank for six years.

Ten external references were submitted as part of the promotion dossier, six chosen by the candidate and four by the department's budget council. One referee did not respond and another referee declined, indicating that he has too many commitments. Nine full professors from a broad range of departments at domestic and international institutions submitted letters, representing Stanford, Illinois, University of Colorado Boulder, University of California Riverside, Miami, Illinois Institute of Technology, University of New South Wales, University of New Brunswick, and University of Calgary. Although not all the letter writers are associated with peer institutions, most of the letter writers hold chaired professorships and are well recognized through their professional awards. One letter is written by a member of the National Academy of Engineering.

Teaching

Dr. Humphreys teaches courses in spacecraft dynamics and GPS-based navigation. Since joining UT, he has taught a total of ten classes (five different courses), including two undergraduate classes [ASE 366K, *Spacecraft Dynamics* (two times) and ASE 372N, *Satellite-Based Navigation* (three times)] and three graduate classes [ASE 389P7, *Global Positioning System* (three times); ASE 396, *Model Based Detection/Estimation* (one time); and ASE 381P8, *Stochastic Detection, Estimation and Control* (one time)]. Enrollment has ranged from 14 to 75 students in his undergraduate classes and from 5 to 24 in his graduate classes. Dr. Humphreys' average course instructor ratings range between 4.6 and 5.0 and his course ratings range between 4.3 and 4.9. His overall course instructor rating is 4.5 and his overall course rating is 4.63. Both are above the department and school averages.

Annual peer reviews conducted by full professors covering all courses taught by Dr. Humphreys are included in the dossier. All evaluations are very positive. It is clear that Professor Humphreys is a very enthusiastic instructor who is "a master of the course material and very much at home in the classroom" (Prof. Fowler). Professor Humphreys "has an engaging personality and is a charismatic teacher... I have been teaching for over 40 years and I think I learned a few things today..." (Prof. Hughes). Graduate courses taught by Professor Humphreys draw students from other departments especially electrical and computer engineering. The students' comments support the peer assessments.

The exemplary nature of Dr. Humphrey's teaching has been recognized by the UT System with the 2012 Regents' Outstanding Teaching Award and the Cockrell School of Engineering with the 2012 Dean's Award for Outstanding Teaching by an Assistant Professor.

Research

Dr. Humphreys' research is in the emerging area of the satellite navigation with thrusts in secure and robust perception, precision positioning and orientation for consumer mobile applications, and instrumentation for remote sensing. Dr. Humphreys directs the Radionavigation Laboratory, which is known for its research on secure

perception. Furthermore, his research influenced broad public policy related to the vehicles using Global Positioning Systems (GPS).

While in rank, Dr. Humphreys has published 16 refereed archival journal papers (13 are based on work at UT and three are based on his PhD work at Cornell). His career total is 18. These papers have appeared in selective journals, including *Navigation*, *Journal of the Institute of Navigation*, *Journal of Field Robotics*, *IEEE Transactions on Aerospace and Electronic Systems*, *International Journal of Critical Infrastructure Protection*, and *IEEE Journal of Selected Topics in Signal Processing*. He also has 34 refereed conference papers in rank (43 career total). Dr. Humphreys has also published twelve articles in the popular press, including *Scientific American* and *GPS World*. Using Google Scholar, his publications have been cited over 900 times and his h-index is 19. Dr. Humphreys holds two patents on work completed before he joined UT, and has submitted one patent application related to work at UT.

In 2012, Dr. Humphreys testified before the US House of Representatives Committee on Homeland Security and participated in a field forum sanctioned by the House Judiciary Subcommittee on Crime, Terrorism, and Homeland Security. He has also given 29 invited talks (including three keynote lectures) and one TedX talk.

Dr. Humphreys has received 14 external research grants, and he is UT lead on 13. He received direct federal funding from the Department of Defense (DTRA) and the US Air Force. He also has received industrial funding from Boeing, Lockheed Martin, Northrop Grumman, Harris, and Samsung. He has participated in three STTR awards (two to Coherent Navigation¹ and one to ASTRA) with funding from the US Navy and US Air Force. His collaborative research project is a US Department of Transportation center that includes researchers from the Center for Transportation Research and the Wireless Networking and Communications Group (WNCG). He has also received research gifts through WNCG and is an unfunded member of the research team for a project supported by the College of Natural Sciences Catalyst Grant Competition. Dr. Humphreys' total research funding is more than \$4.5 million, and his share is more than \$1.8 million (more than \$1.7 million is external).

The external references highlight the high quality and impact of Dr. Humphreys' research and indicate that he has developed an international reputation for his work. While some of the referees are not associated with peer institutions, the budget council noted that this is "the nature of the global-navigation field since few of the top schools have strong researchers working in this area."

Dr. Penina Axelrad (Colorado) writes, "His influence on the field of GPS security is quite remarkable for a faculty member at such an early stage in his career. Dr. Humphreys has published the **most highly cited articles** describing the threat spoofing to GPS use and innovative detection strategies to insure the validity of position and timing solutions. He is widely recognized and his work highly valued because he has addressed this important issue through both analytical developments and experimental demonstrations." "It is clear from his scholarly progress thus far, and the high level of engagement and leadership he already has in the GNSS community, that Dr. Humphreys has great promise to be a significant contributor and thought leader in the future."

Dr. Per Enge (Stanford University, NAE) writes, "Dr. Humphreys has a bright future. The field of navigation security has just opened in the civilian community and will be a strong research area for the next ten to fifteen years. Dr. Humphreys will certainly be a leader in this vital and interesting effort. More importantly, his technical work shows deep underlying knowledge of signal processing, detection and estimation theory, and experimental work."

Dr. Farzad Kamalabadi (Illinois) writes "... it became apparent that Professor Humphreys' expertise in positioning, navigation, and timing (PNT) solutions reach far beyond only the security and authentication

¹ Dr. Humphreys is a co-founder of Coherent Navigation.

aspects and cover diverse areas such as robust and energy-efficient next-generation GNSS receiver design and engineering, PNT coverage and integrity, and privacy. Professor Humphreys' breadth and depth in these areas impressed many of my senior collaborators and colleagues, which included several members of the National Academies.” “In summary, on the basis of the analysis I have provided above, I enthusiastically endorse Professor Humphreys’ advancement to the rank of Associate Professor with tenure at UT Austin.”

Dr. Gerard Lachapelle (Calgary) writes, “The above accomplishments have occurred over a short period of 5 years. His development compared with others at research-intensive universities places him positively in the top 5% of his cohort. I firmly believe that his potential for further professional growth is exceptional. He already established himself as a leader in the area of GNSS. In conclusion, I find Professor Humphreys’ research and professional records outstanding.”

Advising and Student Mentoring

Dr. Humphreys has served as co-supervisor for two PhD students (one is now an assistant professor at UC Riverside). Both students were co-supervised with faculty in the Department of Electrical and Computer Engineering. He also co-supervised two MS students with faculty in his department. Finally, he has supervised three undergraduate students (two with an honors thesis). Currently, he is supervising five PhD students (one is co-advised). Dr. Kamalabadi (Illinois) commented that Dr. Humphreys “has been very effective at graduate student advising and mentoring, as evident by awards they have received while under his supervision.” Dr. Pervan (Illinois Institute of Technology) noted that “his graduate students’ presentations at conferences are always prepared to the highest standards.”

University Service

Dr. Humphreys’ university service is modest, but not unusual for an assistant professor. He has served as the faculty advisor for the UT student chapter of the American Institute of Aeronautics and Astronautics (AIAA) for several years. He is also a contributing member of the Wireless Networking and Communications Group. He served on one committee within the Cockrell School of Engineering.

Professional Service

Dr. Humphreys serves as editor of the *IEEE Transactions on Wireless Communications*, one of the five highest-impact IEEE journals. He also served on the executive committee of the Institute of Navigation as land representative (2013-present) and as track and session chairs for various professional conference and workshops.

Other Evidence of Merit or Recognition

Dr. Humphreys has been recognized for his scholarly contributions by a variety of different organizations. In 2012, he received GPS World Magazine Leadership Award. His students received Best Overall Paper and Best Student Paper Awards at IEEE/ION PLANS Conference in 2012. Finally, he won The University of Texas System Regents’ Outstanding Teaching Award (2012) and the Cockrell School Dean’s Award for Outstanding Teaching by an Assistant Professor (2012).

He has testified before the US Congress regarding unmanned aerial vehicle security and privacy issues, has advised the Central Intelligence Agency and the GPS Directorate of the US Air Force on the civil vulnerability to GPS deception, and directly contributed to Texas House Bill 912, which protects privacy by setting limits on the use of drones. Furthermore, Dr. Humphreys’ work has received extensive coverage in the popular press through a TED talk (over 600,000 views), three panel sessions at SXSW, and media outlets such as NPR, BBC, PBS, CBS, CNN, FOX, ABC, CSPAN, and the New York Times.

Overall Assessment

In summary, Dr. Humphreys is an outstanding teacher and recognized researcher. He has been very successful in building his UT Radionavigation Laboratory and securing research funding. All external reference letters were supportive and uniformly recommend promotion.

Several aspects of Dr. Humphreys' case raised concerns among the promotion and tenure committee.

- (1) Dr. Humphreys had not received a competitive federal grant, which is the traditional means for assistant professors to demonstrate the sustainability of their research funding. I am not concerned by this aspect of his case. He has secured funding from a variety of federal and industry sources, and the impact of his research has not been limited. As federal funding becomes more difficult to secure, we must be more flexible in this respect.
- (2) All four of Dr. Humphreys' students who completed their graduate degrees have been co-supervised. If he had co-supervised the students with the same faculty member(s), I would possibly be concerned about his ability to develop an independent research program, but each student was co-supervised by a different faculty member (two in ECE and two in ASE). In addition, only one of his current students is co-supervised.
- (3) He has received extensive coverage of his work in the popular press, which may imply that his work is too applied or lacks scientific merit. The external reviewers addressed the technical merits and original nature of his work. In addition, one of our goals within the Cockrell School is to promote the impact of our ongoing research. Dr. Humphreys enhances our efforts in this area.

Therefore, I believe that Dr. Humphreys meets or exceeds all expectations for promotion to associate professor and support this case without reservation.



Sharon L. Wood, Dean
9 November 2014

**Statistical Summary for “In Rank”
Todd Humphreys**

Metric	Value
Peer-reviewed Journal Publications	16
Peer-reviewed Conference Publications	34
Corresponding Author on Peer-Reviewed Publications	9/14 journal; 28/34 conference
Total Citations of all Publications (career)*	933
h-index (career)*	19
Google Scholar Total Citations of all Publications (career)	933
Google Scholar h-index (career)	19
Total Research Funding (\$)	\$4,567,640
Candidate Share Research Funding (\$)	\$1,824,640
Total Number of Grants/Contracts Received	20 (14 external)
Number of Grants/Contracts Received as PI	18 (13 external)
PhD Students Completed (count 1 if sole advisor, 0.5 if co-advised)	0.5 + 0.5 = 1 (NB: Humphreys was <i>primary</i> advisor for both students)
MS Students Completed (count 1 if sole advisor, 0.5 if co-advised)	1
PhD Students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	0.5 + 4 = 4.5 (NB: Humphreys is <i>primary</i> advisor for the one co-advised student)
MS students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	0
Courses Taught	10
# of Students Taught	246
Average Instructor Evaluation UG	4.74
Average Instructor Evaluation Grad	4.76
Average Course Evaluation UG	4.56
Average Course Evaluation Grad	4.66
Teaching Awards	UT Regents' Teaching Award
Student Organizations Advised	AIAA Student Organization
Undergraduates Supervised	3
Journal Editorial Boards	1 (IEEE Transactions on Wireless Communications)
Symposia Organized	2 (2013 Texas Wireless Summit; 2010 Civil GNSS Security Meeting)

*Source:

- Publish or Perish (with Google Scholar input)
- ISI Web of Knowledge

Candidate's Statement on Research

Table 1. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	16
Peer Reviewed Conference Proceedings Publications in Rank	34
Total Citations of all Publications (career)*	933
h-index (career)*	19
Google Scholar Total Citations of all Publications (career)	933
Google Scholar h-index (career)	19
Research Funding Raised (total share)	\$4,567,640
Research Funding Raised (candidate share)	\$1,824,640
Total Grants/Contracts Received	14
PI on Grants/Contracts Received	13

Table 2. External Grants and Contracts Awarded while in Rank

Note: The table below reflects only funding *external to UT*. From *internal* UT sources, additional funds in the amount of \$185,000 (\$110,000 candidate share) were obtained. These internal funds came from the Wireless Networking and Communications Group and from the UT College of Natural Sciences.

Co-Investigators	Title	Agency	Project Total/	Candidate Share	Grant Period
None	Connected Autonomous Space Environment Sensors (CASES) Phase II STTR	AFOSR via ASTRA LLC	\$224,491	\$224,491	June 2009--March 2011
None	CASES Adaptations for Antarctic Deployment	NSF via. ASTRA LLC	\$120,000	\$120,000	Jan. 2010--Dec. 2011
None	Investigation into GPS jamming detection and localization techniques	Coherent Navigation, Inc.	\$240,000	\$240,000	Sept. 2010--July 2012
None	IGPS technology concept demonstration time and frequency stability transfer model	Boeing	\$120,000	\$120,000	Sept. 2010--Jan. 2012
None	FOTON sensor development	Lockheed Martin	\$69,000	\$69,000	
None	Cyber Critical Infrastructure Protection GPS Timing Proof of Concept	Northrop Grumman	\$65,050	\$65,050	Nov. 2011--Jan. 2012
None	Emitter locator (EMLOC) system for emitter detection and localization---Phase I STTR	U.S. Navy via Coherent Navigation, Inc.	\$34,000	\$34,000	Aug. 2011--Mar. 2012
None	GPS Vulnerability Simulation Support	Sandia Nat. Lab.	\$40,083	\$40,083	July 2012--Nov. 2012
None	Research into UAV Navigation System Vulnerability to Spoofing Attacks	Harris Corp.	\$75,000	\$75,000	Sept. 2012--Aug. 2013
None	Emitter locator (EMLOC) system for emitter detection and localization---Phase II STTR	U.S. Navy via Coherent Navigation, Inc.	\$225,016	\$225,016	April 2013--April 2015
None	GPS Timing Phase II Proof of Concept	DOD (DTRA) via Northrop Grumman	\$150,000	\$150,000	June 2013--April 2014
None	Strengthening GPS Receiver Resistance to Deceptive Civil Signals	US Air Force GPS Directorate	\$120,000	\$120,000	June 2013--June 2015
None	Precise positioning for mobile devices	Samsung Research America	\$100,000	\$100,000	Jan. 2014--Jan. 2015
PI: Chandra Bhat, UT CTR, 8 co-	Data-Supported Transportation Operations and Planning (D-	U.S. Dept. of Transportation	\$2,800,000	\$132,000	Sept. 2013--Sept. 2017

investigators from CTR and WNCG	STOP)				
TOTAL			\$4,382,640	\$1,714,640	

*Source:

- Publish or Perish (with Google Scholar input)
- ISI Web of Knowledge

Candidate's Statement on Research

Table 1. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	16
Peer Reviewed Conference Proceedings Publications in Rank	34
Total Citations of all Publications (career)*	933
h-index (career)*	19
Google Scholar Total Citations of all Publications (career)	933
Google Scholar h-index (career)	19
Research Funding Raised (total share)	\$4,567,640
Research Funding Raised (candidate share)	\$1,824,640
Total Grants/Contracts Received	14
PI on Grants/Contracts Received	13

Table 2. External Grants and Contracts Awarded while in Rank

Note: The table below reflects only funding *external to UT*. From *internal* UT sources, additional funds in the amount of \$185,000 (\$110,000 candidate share) were obtained. These internal funds came from the Wireless Networking and Communications Group and from the UT College of Natural Sciences.

Co-Investigators	Title	Agency	Project Total/	Candidate Share	Grant Period
None	Connected Autonomous Space Environment Sensors (CASES) Phase II STTR	AFOSR via ASTRA LLC	\$224,491	\$224,491	June 2009--March 2011
None	CASES Adaptations for Antarctic Deployment	NSF via. ASTRA LLC	\$120,000	\$120,000	Jan. 2010--Dec. 2011
None	Investigation into GPS jamming detection and localization techniques	Coherent Navigation, Inc.	\$240,000	\$240,000	Sept. 2010--July 2012
None	IGPS technology concept demonstration time and frequency stability transfer model	Boeing	\$120,000	\$120,000	Sept. 2010--Jan. 2012
None	FOTON sensor development	Lockheed Martin	\$69,000	\$69,000	
None	Cyber Critical Infrastructure Protection GPS Timing Proof of Concept	Northrop Grumman	\$65,050	\$65,050	Nov. 2011--Jan. 2012
None	Emitter locator (EMLOC) system for emitter detection and localization---Phase I STTR	U.S. Navy via Coherent Navigation, Inc.	\$34,000	\$34,000	Aug. 2011--Mar. 2012
None	GPS Vulnerability Simulation Support	Sandia Nat. Lab.	\$40,083	\$40,083	July 2012--Nov. 2012
None	Research into UAV Navigation System Vulnerability to Spoofing Attacks	Harris Corp.	\$75,000	\$75,000	Sept. 2012--Aug. 2013
None	Emitter locator (EMLOC) system for emitter detection and localization---Phase II STTR	U.S. Navy via Coherent Navigation, Inc.	\$225,016	\$225,016	April 2013--April 2015
None	GPS Timing Phase II Proof of Concept	DOD (DTRA) via Northrop Grumman	\$150,000	\$150,000	June 2013--April 2014
None	Strengthening GPS Receiver Resistance to Deceptive Civil Signals	US Air Force GPS Directorate	\$120,000	\$120,000	June 2013--June 2015
None	Precise positioning for mobile devices	Samsung Research America	\$100,000	\$100,000	Jan. 2014--Jan. 2015
PI: Chandra Bhat, UT CTR, 8 co-	Data-Supported Transportation Operations and Planning (D-	U.S. Dept. of Transportation	\$2,800,000	\$132,000	Sept. 2013--Sept. 2017

investigators from CTR and WNCG	STOP)				
TOTAL			\$4,382,640	\$1,714,640	

*Source:

- Publish or Perish (with Google Scholar input)
- ISI Web of Knowledge

EXHIBIT 59

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: 09/04/2014**RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS**Name: El Mohtar, Chadi S. EID: cm34663 Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2014-15 in each count*):At UT Austin since: 09/01/2008 In Present Rank: 7.00 In Probationary Status (TT only): 6
(month/day/year) (# of years) (# of full years)Primary Department: Civil, Architectural, and Environmental Engineering College/School: Cockrell School of EngineeringJoint Department: - College/School: -Other Department(s): -Recommendation actions¹:

By Budget Council/Executive Committee: Promote

Vote² for promotion 24; Against 0; Abstain 1; Absent 2; Ineligible to vote 0

By Department Chair: Promote

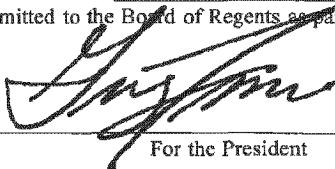
By College/School Advisory Committee: Promote

Vote for promotion 6; Against 1; Abstain 0; Absent 0

By Dean: Promote

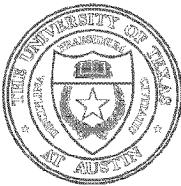
Administrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2015

(To be submitted to the Board of Regents as part of the annual budget.)

By:  Date: December 17, 2014

For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of budget council/executive committee members ineligible to vote due to rank should also be recorded. Enter zero where it would otherwise be blank.



THE UNIVERSITY OF TEXAS AT AUSTIN
COCKRELL SCHOOL OF ENGINEERING

Office of the Dean • 301 E. Dean Keeton Street, C 2100 • Austin, Texas 78712-2100

Dean's Assessment

Chadi S. El Mohtar

Department of Civil, Architectural and Environmental Engineering

Dr. Chadi El Mohtar received his BS degree in civil engineering from Beirut Arab University in 2001, his MS degree in civil engineering from Michigan State University in 2003, and his PhD degree in civil engineering from Purdue University in 2008. Dr. El Mohtar joined the faculty in the Department of Civil, Architectural and Environmental Engineering at the University of Texas at Austin in September 2008. If successfully promoted to associate professor in September 2015, Dr. El Mohtar will have served in probationary status for six years, and in the rank of assistant professor for seven years.

Ten external references were submitted as part of the promotion dossier, five were chosen by the candidate and five were chosen by the budget council. The letter writers comprise faculty from nine universities in the US, including UC Davis, Texas A&M, Georgia Tech, Washington, Michigan, and Cornell. Two are members of the National Academy of Engineering. The final external referee is a faculty member from Europe and he is a foreign associate of the National Academy of Engineering.

Teaching

Dr. El Mohtar taught three different courses (total of 16 classes) while in rank. This includes two undergraduate courses (CE 357, *Geotechnical Engineering* [nine times], and CE 375, *Earth Slopes and Retaining Structures* [two times]) and one graduate course (CE 387L.1, *Consolidation and Shearing Properties of Soils* [five times]). CE 357 is a required course for all undergraduates in civil and architectural engineering, CE 375 is a senior-level elective, and CE 387L.1 is a required course for all graduate students in the geotechnical engineering program.

At the undergraduate level, Dr. El Mohtar's average instructor rating is 4.2 and his average course rating is 3.9, which is comparable with the average ratings in the department (4.07) and school (4.01). His instructor ratings in undergraduate courses indicate low scores in the first semester that he teaches a course (3.4 in CE 357 and 3.8 in CE 375) and a significant improvement in the subsequent offerings. For instance, in CE 357, Dr. El Mohtar's instructor ratings have been above 4.0 every other semester.

At the graduate level, Dr. El Mohtar's average instructor rating is 3.6 and his average course rating is 3.5. These ratings are considerably below the average ratings for the department (4.09) and school (4.19). However, his ratings have improved with time in this course also (increasing from 3.2 to 3.9). The department chair and the budget council statements discuss in detail the issue relating to Dr. El Mohtar's performance in the graduate class. In short, the geotechnical engineering group decided to merge two graduate courses into one, and Dr. El Mohtar was tasked with teaching it. In addition to merging the course content, he introduced modern laboratory experiments into the course. The students believe that too much material is covered in the course and the lab component introduces logistical and work load problems.

The peer evaluations and student comments indicate that Dr. El Mohtar is an effective, organized teacher who cares about the classes he teaches and spends considerable time preparing for the classes. A number of peer evaluations indicate that Dr. El Mohtar incorporates some novel techniques, such as the use of music and innovative flash cards to increase the participation of the students. The undergraduate evaluations during the first instance of teaching pointed to deficiencies symptomatic of lack of experience, but subsequent evaluations broadly reflect an incorporation of feedback and improvement.

Dr. El Mohtar's teaching statement indicates that he takes the student and peer evaluation feedback very seriously to improve and revise the course structure. Consistently with such an approach, Dr. El Mohtar has actively sought training opportunities to improve his teaching skills. For instance, he attended the six-day American Society of Civil Engineers (ASCE) Excellence in Civil Engineering Education (ExCEEd) teaching workshop and he sought the advice of experts from the Center for Teaching and Learning.

Research

Dr. El Mohtar's research is in the area of geotechnical engineering and deals with modifying in-place soils to improve their behavior during extreme loading from natural sources (such as earthquakes, hurricanes, and floods) and loads from the built environment. His research aims to engineer pore fluids and soils to enhance resilience under adverse or extreme loading conditions. As a means to this, Dr. El Mohtar has experimentally studied the fundamental aspects of viscous flow in porous media by relating rheological properties of the fluids and suspensions to the mechanical and hydraulic characteristics of soil.

Dr. El Mohtar has published 14 refereed archival journal papers in rank (including one in press, 15 career total). Four of these papers are based on his research as a PhD student at Purdue and one is based on his research as an MS student at Michigan State. However, all were written while Dr. El Mohtar served on the faculty at UT. Of the nine papers that are based on research conducted at UT, Dr. El Mohtar's sole-supervised PhD student is a co-author on six, his co-supervised PhD student is a co-author on two, and an MS student is a co-author on one¹. The papers have appeared in high-quality journals, such as *ASTM Geotechnical Testing Journal*, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, *Clay and Clay Minerals*, and *British Geotechnique Journal*. Dr. El Mohtar has also published eight refereed conference papers (twelve career total).

While on the faculty, Dr. El Mohtar has secured a total of \$1.7 million in research funding (his share is almost \$1.1 million). Although 14 grants and contracts are listed on Dr. El Mohtar's CV, his funded research can be divided into six categories: (1) containment of non-aqueous phase liquid (funded by the Texas Hazardous Waste Research Center with additional funding from consulting engineering firms), (2) performance of drilled shaft retaining walls (funded by the Texas Department of Transportation with additional funding from consulting engineering firms), (3) liquefaction hazard evaluation (funded by the National Science Foundation), (4) balancing rheology and filtration (funded by the National Science Foundation – CAREER Award), (5) investigation of the interaction between drilling fluids and well formation (funded by a joint industry project through the Center for Petroleum and Geosystems Engineering), and (6) laboratory testing (funded by industry service contracts). The majority of Dr. El Mohtar's funding is from federal sources (NSF provided over \$1 million of the \$1.7 million), he has also secured funding from the state and industry. Dr. El Mohtar has collaborated with a number of senior researchers on these projects, but his expertise related to laboratory testing of soils is clearly identifiable.

The external letters are strong, and address in great detail the significance of Dr. El Mohtar's research.

Dr. Thomas O'Rourke (Cornell, NAE) writes "His work in this area has established him as one of the leading researchers in this field. His research findings are stimulating additional investigations for field implementation of liquefaction remediation. I think that Dr. El Mohtar's development to date is consistent with the highest quality academics in his cohort at research-intensive universities. He shows substantial promise for professional growth and leadership. Based on my knowledge of his work and my review of the materials sent to me, I recommend him strongly for advancement to tenure and Associate Professor."

Dr. Edward Kavazanjian (Arizona State, NAE) writes, "In summary, I believe Dr. Chadi El Mohtar has established himself as one of the leading young investigators among his colleagues at US Universities. He

¹ The budget council statement refers to seven papers that were developed on topics distinct from Dr. El Mohtar's PhD research.

has an excellent record of scholarly publications that have made significant contributions to the field. I have no reason to believe he will not continue to grow professionally, assume a leadership position in the geotechnical field, and make additional contributions to the field.”

Dr. Roman Hryciw (Michigan) writes, “Professor El Mohtar has provided our profession with excellent experimental data and analytical explanations for the permeation of soils with bentonite suspensions. I would consider him a leading expert in this area today. I will conclude my assessment with a strong endorsement of tenure and promotion for Dr. Chadi El Mohtar to rank of Associate Professor at the University of Texas.”

Dr. Susan Burns (Georgia Tech) states, “Dr. El Mohtar’s work on the engineering behavior and rheology of bentonite has been remarkably thoughtful and forward thinking, with emphasis on the fundamental, dynamic behavior of bentonite suspensions, modified with polymers and surfactants. Thus Dr. El Mohtar has established an active research group, and has a record of publishing his work in the highest quality research journals in our field. His rate of publication has been especially impressive given the inherent difficulty in establishing such meticulously detailed experimental work.”

A few of the letter writers did identify concerns with the case. Dr. Kavazanjian (Arizona State, NAE) noted that Dr. El Mohtar’s CAREER award “appears to be the only substantial sponsored project (i.e. project in excess of \$100,000) on which he is the lead investigator.” Dr. John Germaine (MIT) commented that “Chadi is a bit behind on publications, but the rate has picked up in the last two years to a typical pace.” And Dr. Jean-Louis Briaud (Texas A&M) stated that “His number of graduated PhD students is a bit low with one PhD student graduated although it is a very productive student.”

In spite of these reservations, all external reviewers indicated that Dr. El Mohtar exhibited great promise for further professional growth and leadership.

Advising and Student Mentoring

Dr. El Mohtar has graduated two PhD students (one co-supervised) and seven MS students (one co-supervised). He is currently supervising three PhD students and one MS student (co-supervised). He has advised and mentored 15 undergraduate students in research, ten from UT and five as summer interns from other universities. Four of these undergraduate students have pursued graduate degrees.

Dr. El Mohtar also serves as the faculty advisor to the graduate student chapter of the ASCE Geo-Institute and he has served for the past two years as the graduate admissions coordinator for the geotechnical engineering group. In the latter role, he processes approximately 100 applications each year, coordinates recruiting visits, advises and mentors new students, and advises all MS students who pursue a coursework-only degree.

University Service

Dr. El Mohtar has served on several committees within the department, including the Curriculum Committee, ABET Review Committee, and Graduate Curricula and Policies Committee. He has also served on a faculty search committee for a position in geotechnical engineering and as graduate admissions coordinator for the geotechnical engineering area.

Professional Service

Dr. El Mohtar has been active in technical committees within the American Society for Testing and Materials (ASTM) and ASCE. He has served as an officer of two ASTM committees or work groups. He has organized sessions at two conferences and participates on three technical committees.

Other Evidence of Merit or Recognition

Dr. El Mohtar has received two major awards while in rank: (1) an NSF CAREER award in 2012 and (2) the Arthur Casagrande Professional Development Award from the Geo-Institute of ASCE in 2014. The Casagrande Award recognizes a young professional (35 years of age or younger) who is an outstanding practitioner, researcher, or teacher of geotechnical engineering in the U.S. His students also received a Best Student Paper Award at the 7th International Conference on Remediation of Contaminated Sediments.

Overall Assessment

Dr. El Mohtar experienced a slow start at UT. He is an experimentalist and it took a while for him to establish his laboratory, secure research funding, and publish papers related to his independent work. However, his productivity has increased dramatically in the past three years and he has a sound vision for his future research. He also experienced some start-up problems in the classroom, but has demonstrated a commitment to undergraduate teaching, and is making progress in his graduate course. He has a solid record of graduate student supervisions, and has been active in service activities within the university and within professional organizations. He has been recognized with two noteworthy awards.

I am quite familiar with this case, because I served as the department chair in civil, architectural and environmental engineering when Dr. El Mohtar joined the faculty. I met with him frequently during his probationary period, and also met with his mentors, to monitor his progress.

The promotion and tenure committee supported promotion of Dr. El Mohtar, but the case generated considerable discussion. The one negative voter indicated that this case was very similar to another considered this year, and decided to vote the same way on both. I agree that there are many similarities between the two cases, but there are also some significant differences: (1) Dr. El Mohtar was hired because of his interest and expertise conducting laboratory experiments. None of the other faculty members in the group work in this area. Therefore, he had to rebuild the soils testing labs from scratch and he could not rely on experienced graduate students or technical staff within the group. He introduced state-of-the-art testing for research and teaching, and he trained a new staff member during his first two years on the faculty. (2) Dr. El Mohtar collaborated with a number of senior faculty members within the geotechnical engineering group, but his areas of expertise complemented those of his colleagues, and his contributions to the projects are distinct. (3) Dr. El Mohtar has received two significant external awards.

Accordingly, I believe that Dr. El Mohtar meets expectations for promotion to associate professor and recommend promotion.



Sharon L. Wood, Dean
16 November 2014

CHADI S. EL MOHTAR, Ph.D.
ASSISTANT PROFESSOR
DEPARTMENT OF CIVIL, ARCHITECTURAL AND ENVIRONMENTAL ENGINEERING
THE UNIVERSITY OF TEXAS AT AUSTIN

Master Promotion Summary Table

Statistical Summary for “In Rank”

Metric	Value
Peer-reviewed Journal Publications	14
Peer-reviewed Conference Publications	9
Corresponding Author on Peer-Reviewed Publications	11
Total Citations of all Publications (career)*	92
h-index (career)*	6
Google Scholar Total Citations of all Publications (career)	103
Google Scholar h-index (career)	6
Total Research Funding (\$)	\$1,728,655
Candidate Share Research Funding (\$)	\$1,089,519
Total Number of Grants/Contracts Received	14
Number of Grants/Contracts Received as PI	8
PhD Students Completed (count 1 if sole advisor, 0.5 if co-advised)	1.5
MS Students Completed (count 1 if sole advisor, 0.5 if co-advised)	6.5
PhD Students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	3*
MS students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	0.5
Courses Taught	16
# of Students Taught	535 (UG: 432 and Grad: 103)
Average Instructor Evaluation UG	4.19 (last 3 years: 4.36)
Average Instructor Evaluation Grad	3.64 (last 3 years: 3.77)
Average Course Evaluation UG	3.93 (last 3 years: 4.00)
Average Course Evaluation Grad	3.50 (last 3 years: 3.63)
Teaching Awards	0
Student Organizations Advised	1
Undergraduates Supervised	15
Journal Editorial Boards	0
Symposia Organized	2

*Source:

Publish or Perish
 ISI Web of Knowledge

** = $\Sigma(\text{course GPA} \times \text{course enrolment}) / \Sigma\text{course enrolment}$

*This number includes 1 PhD student that will be appointed my new WW JIP project on 09/2014.

2. TEACHING

Budget Council Statement

Prepared by Robert B. Gilbert



Evaluation of Dr. El Mohtar's teaching was based on a review of his instructor surveys, peer reviews of his teaching, and a review of his teaching portfolio.

While in rank as an Assistant Professor, Dr. El Mohtar has taught three different courses: two undergraduate courses and one graduate course:

CE 357 Geotechnical Engineering. This undergraduate course is required of all students in Civil Engineering and Architectural Engineering and is normally taken in the junior year. This course represents the first exposure of students to soil as an engineering material and it is also a prerequisite for the two additional undergraduate courses in Geotechnical Engineering. Because this course is the only required geotechnical course, it is important for exposing new students to the field of geotechnical engineering.

CE 375 – Earth Slopes and Retaining Structures. This undergraduate course is an elective for both Civil Engineering and Architectural Engineering students and is normally taken in the senior year. It is an advanced undergraduate course that concentrates on geotechnical engineering problems associated with the stability of soil masses and the design of support systems.

CE 387L – Consolidation and Shearing Properties of Soils. This graduate course is a required course taken by all graduate students in geotechnical engineering during their first year at UT. The course covers the mechanics of soil behavior, a topic that is a fundamental building block for the other ten graduate courses in geotechnical engineering. The course includes a significant laboratory component, which requires an unusual amount of student time and student-faculty interaction.

While in rank from Fall 2008 through Spring 2014 Dr. El Mohtar has taught 16 classes, with 11 undergraduate and 5 graduate classes. His courses typically have more than 20 students and he has been willing to teach courses at all levels. His teaching load is consistent with expectations within the Department and is similar to other faculty in our group. He is the only current faculty member in our group who is teaching a required graduate course.

At the undergraduate level, Dr. El Mohtar's average instructor rating is 4.2 and his average course rating is 3.9, which puts him on par with the average ratings both in the Department and in the School of Engineering. In CE 357 over the past three years, his average instructor rating (4.3 in four offerings) is the same as the average for all other faculty including full professors who taught that course (4.3 in eight offerings). In CE 375 over the past three years, his instructor rating (4.6 in one offering) exceeds those of the other full professor teaching the course (4.3 and 4.5). There are two notable aspects in his ratings. First, he received relatively low ratings his first semester here teaching CE 357. He subsequently worked hard to improve his teaching, consulting with the UT Center for Teaching and Learning and participating in a 6-day teaching workshop offered by American Society of Civil Engineers Excellence in Civil Engineering Education, and his ratings improved markedly. Furthermore, his ratings also improved

Chadi El Mohtar

Department of Civil, Architectural
and Environmental Engineering

significantly between the first time and the second time he offered CE 375. Therefore, it is clear that Dr. El Mohtar is committed to being a strong teacher. Here is an example undergraduate student comment from a recent offering; "Great Prof., very engaging. I enjoy the class discussions on things that aren't immediately intuitive." A second noteworthy aspect of his student ratings is that they dipped slightly in 2013 and 2014 when his father in Lebanon became gravely ill and ultimately passed away. It is a testament to Dr. El Mohtar's dedication to teaching that he still performed so well for the students during this trying personal time for himself.

At the graduate level, Dr. El Mohtar's average instructor rating is 3.6 and his average course rating is 3.5. These ratings are below the average ratings for the Department and the School of Engineering. However, this graduate course is not the typical graduate course in engineering. It is a required course that is time-consuming because it has a significant laboratory component; the students rate it as an above-average work load and make comments like "it did become frustrating to organize lab meetings around everyone's schedules." Also, the geotechnical group re-organized our graduate courses and asked Prof. El Mohtar to combine material from two previous courses (one on shear strength and one on consolidation) into a single course the first time that he taught it. Finally, his course ratings have steadily improved each time he has taught the course. This course is important to our graduate program and our students are fortunate to have Dr. El Mohtar teaching it with his strong emphasis on fundamental concepts and experimental methods. We expect that Dr. El Mohtar will continue to improve the course in the future.

The peer evaluations for Dr. El Mohtar are positive and consistent with his student evaluations. All peer reviewers note the innovative techniques he uses to try to engage students, such as music, voting flash cards and electronic note templates, that these techniques can be effective, and that there is room for improvement. One peer reviewer concludes "He was obviously interested in the students and in helping them to understand the subject." The peer reviews for his graduate class are particularly insightful to the dedication of Dr. El Mohtar to teaching. One reviewer concludes, "My overall sense of this class and instructor is that Dr El Mohtar is an enthusiastic teacher who has good communication with the students, and who is certainly dedicated to the idea that they should connect the theory they learn in the classroom with laboratory experience." A second reviewer concludes, "In summary, I found that Dr. El Mohtar is a good and effective teacher; there is room for improvement, but many of the essential elements to being a great teacher are in place."

Dr. El Mohtar's teaching portfolio demonstrates his commitment to and skill at teaching. He has developed a complete set of electronic note templates for each course. These templates are then filled in by the students during the lecture in order to encourage interaction and engagement. He has continuously improved these templates over time as he learns what works best for the students. He has also devoted significant effort to developing effective laboratories for the graduate course on soil mechanics. He has modified this portion of the course each time he has offered it in an attempt to make it as useful and efficient for the students as possible.

While in rank, 5.5 M.S. students and 1.5 Ph.D. students have graduated under Dr. El Mohtar's supervision. He has also served as a member of 16 Ph.D. committees and as a reader for 13 M.S.

Chadi El Mohtar

Department of Civil, Architectural
and Environmental Engineering

theses or reports. Finally, he has supervised 15 undergraduate research assistants. Dr. El Mohtar is contributing significantly to educating and mentoring students outside of the classroom.

Chadi El Mohtar

Department of Civil, Architectural
and Environmental Engineering

CHADI S. EL MOHTAR, Ph.D.
 ASSISTANT PROFESSOR
 DEPARTMENT OF CIVIL, ARCHITECTURAL AND ENVIRONMENTAL ENGINEERING
 THE UNIVERSITY OF TEXAS AT AUSTIN

Teaching Summary Tables

Table 1. Teaching Summary

Metric	Value
# of Students Taught	535 (UG: 432 and Grad: 103)
Average Instructor Evaluation UG	4.19 (last 3 years: 4.36)
Average Instructor Evaluation Grad	3.64 (last 3 years: 3.77)
Average Course Evaluation UG	3.93 (last 3 years: 4.00)
Average Course Evaluation Grad	3.50 (last 3 years: 3.63)

Table 2. Course schedule by semester in CE since 2008; number of students indicated.

Course	F 08	S 09	F 09	S 10	F 10	S 11	F 11	S 12	F 12	S 13	F 13	S 14
CE 357	34	33		32	38	46	36			45	55	47
CE 375				27				39				
CE387L.1			27		14		20		24		18	

Table 3. Summary of Current Graduate Students Supervised at UT-Austin

Student	Co-Supervisor	Degree	Start Date	Date Reached Candidacy	Date Expected to Reach Candidacy	Expected Graduation Date
Kwan, Wing Shun		PhD	09/2011	05/2014		05/2015
Sangroya, Ritika		PhD	09/2012	08/2014		05/2016
Brewster, Alexander	R.B. Gilbert	MS	09/2013			05/2015
TBD*		PhD	09/2014		08/2016	05/2018

* Student to be appointed on the recently awarded WW JIP project.

Table 4. Summary of Current Undergraduate Students Supervised at UT-Austin

Student	Co-Supervisor	Degree	Start Date	Expected Graduation Date
Patricia Bennett		BS	09/2013	Spring 2015
Abigail Kugel		BS	06/2014	Spring 2015
Brian Landry		BS	06/2014	Spring 2015
Masaaki Ward		BS	06/2014	Spring 2015

* = $\Sigma(\text{course GPA} \times \text{course enrolment}) / \Sigma\text{course enrolment}$

CHADI S. EL MOHTAR, Ph.D.
 ASSISTANT PROFESSOR
 DEPARTMENT OF CIVIL, ARCHITECTURAL AND ENVIRONMENTAL ENGINEERING
 THE UNIVERSITY OF TEXAS AT AUSTIN

Research, Grants and Contracts
Summary Tables

Table 1. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	14
Peer Reviewed Conference Proceedings Publications in Rank	9
Total Citations of all Publications (career)*	92
h-index (career)*	6
Google Scholar Total Citations of all Publications (career)	103
Google Scholar h-index (career)	6
Research Funding Raised (total share)	\$1,728,655
Research Funding Raised (candidate share)	\$1,089,519
Total Grants/Contracts Received	14
PI on Grants/Contracts Received	8

Table 2. Grants and Contracts Awarded while in Rank

Co-Investigators * = PI	Title	Agency	Project Total	Candidate Share	Grant Period
N/A	Lab Simulation of In-Situ Grouting for Liquefaction Mitigation	Office of Dean of Graduate Studies	\$17,556	\$17,556	06/09-07/09
D. Reible* and R. Gilbert	Effective Containment of NAPL in Sediments	Texas Hazardous Waste Research Center	\$67,500	\$11,250	09/08-08/10
R. Gilbert* and J. Zornberg	Long-Term Performance of Drilled Shaft Retaining Walls	Texas DOT	\$731,754	\$243,918	09/09-08/13
R. Gilbert*	Consolidation and Shear Strength Testing of Contaminated Sediments	Geosyntec Corporation	50,000	25,000	09/09-08/11
R. Gilbert* and J. Zornberg	Long-Term Performance of Drilled Shaft Retaining Walls	Fugro Consultants, Inc.	60,000	20,000	09/09-08/11
N/A	Measuring the Resilient Modulus For Port of Corpus Christi ¹	HVJ Associates – Austin, TX	\$4,313	\$4,313	05/10
N/A	Measuring the Shear Strength under Undrained Conditions ¹	GeoPentech, Santa Anna, CA	\$1,500	\$1,500	07/10
S. Kramer*, M. Khun, and E. Rathje (I am PI for the UT share)	NEESR-CR: Evolutionary Intensity Measures for More Accurate and Informative Liquefaction Hazard Evaluation	NSF/NEES	\$638,327 \$166,732 ^X	\$166,732	09/10-08/13
N/A	CAREER: Balancing Rheology and Filtration: An Experimental and	NSF	\$400,000	\$400,000	12/12-11/17

Chadi El Mohtar

Research Summary Tables

	Probabilistic Approach for Suspension Flow and Sustainability in Heterogeneous Granular Media				
D. Reible*	Geotechnical Investigation of Gowanus Canal Sediments: NAPL Expression [†]	GEI Consultants	\$12,600	\$6,300	10/12-02/13
N/A	Measuring Shear Strength of Soft limestone rocks using DST [†]	Freese and Nichols Inc.	\$9,200	\$9,200	06/13-07/13
N/A	REU Supplement: CAREER: Balancing Rheology and Filtration: An Experimental and Probabilistic Approach for Suspension Flow and Sustainability in Heterogeneous Granular Media	NSF	\$10,000	\$10,000	1/14-08/14
R. Gilbert	Effectiveness of Peizometers in High-Plasticity Clays	Geosyntec Corporation	47,500	23,750	09/13-08/15
K. Gray	Investigating the interaction between Drilling Fluids and Well Formation from a combined Rheological and Physical Properties Context	Wider Windows Joint Industry Project	\$150,000	\$150,000	08/14-07/17
TOTAL			1,729K	1,090K	

*Source:

Publish or Perish
 ISI Web of Knowledge

EXHIBIT 60

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: September 5, 2013**RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS**Name: J. Eric BickelPresent Rank: Assistant ProfessorYears of Academic Service (*Include AY 2013-14 in each count*):At UT Austin since: 9/1/08 In present rank: 6 years; In Probationary Status (TT only): 6 years
(m/d/y) (# of years) (# of years)Department: Mechanical EngineeringOther: Operations Research/Industrial EngineeringCollege/School: Cockrell School of EngineeringRecommended action¹:By Budget Council/Executive Committee: PromoteVote² for promotion 29; Against 0; Abstain 0; Absent 7By Department Chair: Promote

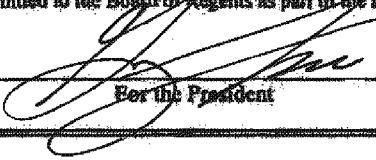
By SBS Executive Committee:

Vote² for promotion _____; Against _____; Abstain _____; Absent _____

By Director:

By College/School Advisory Committee: PromoteVote² for promotion 7; Against 0; Abstain 0; Absent 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2014

(To be submitted to the Board of Regents as part of the annual budget.)

By: 

For the President

12/16/2013

Date:

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²All votes are to be recorded as For, Against, or Abstain. (Note: unexplained abstentions will be interpreted as weak negative votes by the President's Committee.) Also record number of absent eligible voting members.

Dean's Assessment
James Eric Bickel
Department of Mechanical Engineering

J. Eric Bickel received his BS degree in Mechanical Engineering from New Mexico State University in 1993. He received his MS and PhD degrees in Engineering-Economic Systems from Stanford University in 1994 and 1999, respectively. After completing his PhD, he spent five years as a consultant with Strategic Decisions Group in Houston and four years as an assistant professor in the Department of Industrial and Systems Engineering at Texas A&M University. He joined the faculty at UT Austin in 2008 as an assistant professor in the Department of Mechanical Engineering as part of the graduate program in Operations Research/Industrial Engineering.

Ten external review letters were submitted as part of the promotion dossier, four were suggested by the candidate and six were selected by the budget council. All reviewers are current or emeritus faculty members at US universities and one is a Nobel Laureate in Economics and a member of the National Academy of Sciences and the Institute of Medicine. Three other reviewers, selected by the candidate, declined without any negative implication.

Teaching

Dr. Bickel has taught one undergraduate course in mechanical engineering and two graduate courses in operations research and industrial engineering: ME 353, *Engineering Finance* (six times); ORI 397, *Introduction to Decision Analysis* (five times); and ORI 390.R, *Applied Probability* (three times). His average overall instructor/course ratings for these courses are 3.6/3.4, 4.4/4.2 and 4.3/4.1 respectively.

As a baseline for comparison the average weighted (by class size) overall instructor ratings for undergraduate and graduate courses for assistant professors in Mechanical Engineering are 4.0 and 4.2 respectively. Comparing Dr. Bickel's overall instructor rating to that of other faculty teaching ME 353, one finds that his ratings are quite good. In fact, his last evaluations of 4.5/4.2 for Spring 2013 are among the best in the recent past. The in-class peer evaluations and student comments confirm that his teaching is good and continues to improve.

In addition, Dr. Bickel has led the development a Management Science and Engineering certificate program in the Department of Mechanical Engineering. This is aimed at encouraging engineering students to not only develop a focus in this topic area, but to pursue a research project encouraging top students to eventually attend graduate school. Dr. Bickel also co-led a week long course at Stanford University for the Decision Education Foundation targeting high-school teachers and adult mentors of at-risk youth. He developed two professional education courses in *Decision Quality* and *Decision Leadership* which he taught to executives and managers in the energy industry in 2011.

Research

Dr. Bickel's research focuses on the theory and practice of decision analysis under uncertainty, with applications to climate change and energy exploration. In particular his recent work has focused on the development of new methodologies for probability-based decision-making. He has several recognized contributions including new approaches to the discretization of continuous distributions to support efficient computation, and representation of partial information and joint distributions. Also of note are his publications bringing rigor and uncertainty modeling and analysis to bear on questions in climate change.

In rank at UT, he has published 24 refereed journal papers, two refereed conference publications, and six book chapters. He has 30 refereed journal papers in his career.

Dr. Bickel has secured \$4.0 million in research funding in rank at UT (his share is \$1.45 million). He served as the principal investigator on eleven of the fifteen grants/contracts, which include a very diverse set of sponsors from federal sources (National Science Foundation and Department of Energy) and industry (BP America and Schlumberger). Dr. Bickel received a CAREER award from the National Science Foundation in 2010.

The external reviewers' assessment of Dr. Bickel's research speak to his creativity, the potential practical impact of his published work, and his leadership and service to the field. Representative highlights include:

Dr. Thomas Schelling (University of Maryland and Harvard University, Nobel Prize, NAS, IOM) writes, "I find Eric Bickel to be as imaginative, insightful, and original on geoengineering as any expert I know in the field. He has produced ideas that others have not originated. His professional background in statistics and probability is, as far as I know, unique in the field. He is a policy thinker. Others contribute more to their particular sciences—atmosphere, chemistry or physics, agronomy, oceanography [sic] - but Bickel is almost unique in his ability to identify crucial issues in the possibl[e] governance of either experiments or possible ultimate deployment of any effort at managing solar radiation."

Dr. Katherine Ensor (Rice University) writes, "Dr. Bickel has clearly established himself as a leading scholar in decision analysis. He is extremely well published, well funded and a strong contributor to the community through his editorships, conference participations and invited speaking opportunities. Further, his ties to the corporate community are a strong indicator of the relevance of his research to leading global corporations. Dr. Bickel is clearly a leader as evidenced by his initiation of the joint corporate outreach between the University of Texas and Stanford; simply impressive."

Dr. Stephen Pollock (University of Michigan) writes, "Professor Bickel's career trajectory is unusual for its acceleration, direction and consistency. Usually, when an Assistant Professor comes up for a tenure/promotion decision, the major question to be asked is whether the candidate *will* be the kind of colleague one would want to have for the rest of his/her academic career; whether the past accomplishments point towards a *future* of productivity and excellence. In Bickel's case, the questions are almost moot – he is *already* a person who one wants to have as a colleague for the infinite future, and his past accomplishments are *already* those one would expect to have in a full Professor."

Advising and Student Mentoring

While in rank, Dr. Bickel has graduated two PhD students and has three more in progress. One of his PhD advisees from Texas A&M has taken an academic position at the University of Alaska. Dr. Bickel has also graduated thirteen MS students and mentored four undergraduate students.

University Service

Dr. Bickel has served on a number of departmental committees related to the undergraduate curriculum and recruiting of graduate students.

Professional Service

Dr. Bickel has been very active in national and international professional activities. He has served as an associate editor and on the editorial board of *Decisional Analysis*, a flagship journal in his research area, and on the editorial board of the journal *EURO Journal of Decision Processes*. He is now the vice president/president-elect of the 1200-member Decision Analysis Society (DAS).

Other Evidence of Merit or Recognition

Dr. Bickel has received national and international recognition for his research. He received a CAREER Award from the National Science Foundation in 2010, he is an elected fellow of the Society of Decision Professionals, he is the vice president/president elect of the Decision Analysis Society, and he was invited to present to a distinguished panel of scientists and Nobel Prize winners at the Copenhagen Consensus on Climate Change in 2009.

Overall Assessment

Dr. Bickel has a well-rounded profile both as a researcher and teacher. He has made research contributions on the methodological side of decision analysis under uncertainty that are likely to have practical impact and he is recognized as a leader in the field. He has garnered substantial attention outside of academe for his work addressing questions in the area of climate change. His research output in terms of graduate student supervision and publications is strong.

Accordingly, I am pleased to provide a strong recommendation to promote J. Eric Bickel to associate professor with tenure.



Sharon L. Wood, Interim Dean
10 November 2013

BUDGET COUNCIL STATEMENT OF TEACHING

ERIC BICKEL

Overview and Principal Areas of Teaching

Dr. J. Eric Bickel is a member of the faculty in our Graduate Program in Operations Research & Industrial Engineering (ORIE) in the Mechanical Engineering Department (ME). He teaches core undergraduate courses in ME, and required and elective graduate courses in ORIE. Dr. Bickel believes that students at all levels of education—from high school students to undergraduate students to graduate students to professionals engaged in continuing education—should learn to think critically about making decisions in all aspects of their lives. This core belief drives Dr. Bickel's teaching activities. His students respond very well to Dr. Bickel's passion regarding the importance of learning decision making as a fundamental life skill.

Since joining our faculty in the 2008-2009 academic year, Dr. Bickel has taught one undergraduate course, ME 353 *Engineering Finance*, and two ORIE graduate courses, ORI 397 *Decision Analysis* and ORI 391Q.1 *Applied Probability*. *Engineering Finance* is a core undergraduate course in the ME curriculum. *Decision Analysis* is an elective course in ORIE in Dr. Bickel's primary area of research. *Applied Probability* is a required course for ORIE MS students, a topic on the ORIE PhD qualifying exam, and a topic on the ME interdisciplinary PhD qualifying exam. In Fall 2013, Dr. Bickel will teach a second ME core undergraduate course, ME 335 *Engineering Statistics*, due to the recent retirement of Prof. J. Wesley Barnes.

Evaluation Procedure

This statement is prepared by a member of the ME Budget Council, Dr. David Morton, Engineering Foundation Professor #1 and ORIE Coordinator. The statement is based on: (i) a review of student course-instructor surveys conducted at the end of each course; (ii) a review of Dr. Bickel's Teaching Portfolio, including course syllabi, homeworks, quizzes, case studies, and exams; (iii) a review of Dr. Bickel's promotion package including his Statement on Teaching and Statement on Advising, Counseling, and Other Student Services; (iv) five peer teaching evaluations from Spring 2011 through Spring 2013 in Decision Analysis and Engineering Finance; (v) a review of a draft of Dr. Bickel's NSF CAREER proposal, and (vi) joining Dr. Bickel's monthly research group meetings on several occasions. In Dr. Bickel's case, each peer teaching evaluation was carried out by Dr. Morton, and the timing of the evaluations was agreed upon ahead of time. There were no surprise visits by an evaluator.

Summary of Teaching Evaluations

The Overall Instructor Rating is used as the prime indicator from the Course Instructor Survey. (The Overall Course Rating is also a prime indicator, but in Dr. Bickel's case the course rating consistently lagged the instructor rating by 0.2 points, which is consistent with Department, School, and University lags.) Dr. Bickel taught the undergraduate core course Engineering Finance six times and received a rating of 3.65/5.0. This value is below ME, Cockrell School, and University averages of 4.0-4.2 over this timeframe. That said, Engineering Finance is a

challenging course to teach, and prior to Dr. Bickel joining our faculty, the instructor rating was substantially lower. Moreover, the two highest scores Dr. Bickel has received in ME 353 are in his two most recent offerings, including a Spring 2013 rating of 4.5.

Dr. Bickel's average instructor rating in Applied Probability is 4.3 and in Decision Analysis is 4.4. These are somewhat above Department, School, and University averages. Moreover, these are excellent ratings considering that these graduate courses have strong enrollments. The required graduate course Applied Probability averages about 35 students, and the elective course Decision Analysis averages nearly 30 students.

One section of the syllabus for each of Dr. Bickel's class includes a section called "Learning Environment." In that section, he encourages students to ask questions both in class, and outside of class, and to participate in classroom discussions. The section concludes with, "I want you to do well and am concerned about your performance. This material is important. Really!" The fact that the vast majority of students respond positively to Dr. Bickel's passion is clear from student evaluations.

Decision Analysis, Assessing Probabilities, and Engineering Practice

Decision Analysis is an elective course in the ORIE Program, and is a new course developed by Dr. Bickel. It is attended by students from programs in ORIE, Civil, Architectural & Environmental Engineering, Energy & Earth Resources, and Petroleum & Geosystems Engineering, among others. A key part of the field of decision analysis concerns eliciting probabilities from experts on the likelihood of competing hypotheses, a central notion in science and engineering. Dr. Bickel teaches methods for assessing such probabilities in Decision Analysis, and he does so early on in the course for reasons now explained. Exams in Decision Analysis involve multiple-choice questions, with responses a , b , c , and d . An answer to a question involves the student assigning probabilities p_a , p_b , p_c , and p_d , that each response is correct. These probabilities should be nonnegative, and sum to one. Exam grading is done using a logarithmic scoring rule, appropriately scaled and shifted. Assigning probability zero to a correct response yields a score of negative infinity for that specific question, and it is impossible to recover from such a score. This type of exam forces students to internalize the idea of a log-based utility function, to understand more deeply the notion of assigning probabilities to competing hypotheses, and to realize that this scoring rule yields a more informative test score than does the binary outcome of students simply selecting, and sometimes guessing, what they believe to be the correct response.

Exam scoring in Decision Analysis is representative of Dr. Bickel's teaching more broadly: He practices what he teaches and encourages (well, in the case of the Decision Analysis exams, requires) students to do so, too. To be sure, a few students complain in their instructor surveys saying, e.g., "Probabilistic grading is confusing." That said, the vast majority of students embrace this idea, in part because Dr. Bickel motivates it so well.

With the same motivation, Dr. Bickel has redesigned our undergraduate Engineering Finance course, to include a focus on decision making under uncertainty. Student survey responses in this course include, "I think this is one of the most important classes that engineers can take." And, "Dr. Bickel is one of the best professors I've had. He was very good about teaching us both what

he had to (the syllabus) and what he knew we should know for life (mortgages, time shares, solar panels, etc.)”

In Applied Probability and Decision Analysis, Dr. Bickel awards extra credit with each homework assignment if a student describes a newspaper or magazine article that has a discussion that would benefit from the analytical tools taught in the course. In Applied Probability, students read Nassim Taleb’s popular book, *Fooled by Randomness*, and write a report. Dr. Bickel makes demonstrating knowledge and applicability of the course material beyond the course fun and interesting.

Beyond Organized Teaching

As part of Dr. Bickel’s NSF CAREER grant, he proposed to create a certificate program in Management Science and Engineering for ME undergraduates. Three high-performing students have participated in this certificate program so far, which includes them taking at least one graduate-level course in ORIE and performing a research project with an ORIE faculty adviser. Dr. Bickel has used ME’s curriculum reform program called PROCEED to help fund his certificate program, offering fellowships to top applicants.

Dr. Bickel has worked with the Decision Education Foundation, which came out of Stanford University, to help teach high school teachers, and mentors, of at-risk youth how to teach their students decision-making skills. Dr. Bickel further worked with the University’s Center for Lifelong Engineering Education (CLEE) and Stanford’s Center for Professional Development to offer two courses in Stanford’s Strategic Decision and Risk Management Program. Dr. Bickel offered courses in *Decision Quality* and *Decision Leadership* to executives in Houston in December 2011, and he has plans to do so again in January 2014.

In Spring 2012, ORIE launched a new graduate course entitled *Applied Projects in ORIE (A PRIORI)*, and it has been taught twice so far. In Spring 2013, Dr. Bickel recruited DrillingInfo as an industrial sponsor of a student project, and he advised an interdisciplinary team of students from Petroleum & Geosystems Engineering and ORIE to work on that project. From speaking with Dr. Bickel, reviewing feedback from the industry sponsor, and speaking with the student team, the project was a success for all involved.

ORIE holds weekly graduate seminars, and the faculty rotate responsibility of organizing the seminar and inviting external speakers. When hosting the seminar, Dr. Bickel has invited a number of outstanding speakers including Shane Henderson (Cornell), Ralph Keeney (Duke), and Bonnie Ray (IBM).

Dr. Bickel has graduated two PhD students in ORIE, and graduated one from Texas A&M, prior to joining our faculty. He has two more PhD students in progress. Dr. Bickel has further graduated 13 MS students in his time at the University. In addition to individual weekly mentoring meetings with Dr. Bickel, his students benefit from a monthly research group meeting. I have joined that meeting on several occasions, and students have presented the current state of their research. On each occasion, faculty from the McCombs School of Business have also joined the meeting. And, often Dr. Bickel invites the visiting speaker from the ORIE Seminar Series to join, too, rather than simply meeting with Dr. Bickel individually.

Balance between Undergraduate and Graduate Teaching

Dr. Bickel has offered eight graduate courses and six undergraduate courses. This balance is more towards undergraduate offerings than most of the faculty in the Graduate Program in ORIE, where the bulk of our teaching responsibilities are at the graduate level. That said, Dr. Bickel has taught Decision Analysis each year while he has been in rank, and this helps feed his research program with MS and PhD students.

Willingness to Teach Courses with Strong Student Demand

Dr. Bickel has taught Engineering Finance six times in rank, and this course has typical enrollments of about 110 students. As indicated above, Dr. Bickel also teaches a required MS course in Applied Probability that averages about 35 students, many from outside ORIE, and his elective graduate course in Decision Analysis is popular (about 30 students), again with many students attending from outside the ORIE program. Dr. Bickel volunteered to teach Engineering Statistics in Fall 2013, upon the retirement of Prof. J. Wesley Barnes. Like Engineering Finance, this is a core course in the ME curriculum with typical enrollments of about 110 students.

Summary

Dr. Bickel is an excellent teacher. His strong teaching evaluations at the graduate level, and his good teaching evaluations in a challenging core undergraduate course both attest to this. Moreover, Dr. Bickel has significant teaching activity outside of organized courses, particularly for an assistant professor. The fact that his graduate classes are in demand, not only from students in ORIE but also from students across Engineering and elsewhere in the University, speaks to his reputation as an excellent teacher. The Graduate Program in Operations Research & Industrial Engineering, the Department of Mechanical Engineering, and the Cockrell School of Engineering are fortunate to have such a passionate and outstanding teacher and mentor in Dr. Bickel.



Dr. David P. Morton
Professor
Engineering Foundation Endowed Professor #1

September 3, 2013

Promotion Review
3b – Research

J. E. Bickel
Mechanical Engineering (ORIE)

Table 2 summarizes my grant and contract funding. While at UT, I have been a PI or Co-PI on over \$3.8 million in research funding, of which over \$1.2 million (32%) is my share.³ My research funding has come from a diverse set of sources including peer-reviewed funding from the National Science Foundation (6 and 9—including a CAREER award), the Research Partnership to Secure Energy for America (8), the National Energy Technology Laboratory (7), and the Department of Energy (2). Thus far, I have partnered with faculty in the Department of Petroleum and Geosystems Engineering, the Bureau of Economic Geology, the LBJ School of Public Affairs, and the Department of Petroleum Engineering at Texas A&M.

I have also actively sought internal funding opportunities and participated in the support of joint industry projects (JIPs). As shown in Table 3, I have obtained \$229,000 in such funding while at UT. As shown in Table 4, this brings my total funding while at UT to over \$4.0 million, with my share being almost \$1.5 million (36%).

TABLE 2: GRANTS AND CONTRACTS

#	PI	Co-PI(s)	Title	Sponsor	Peer Review	Grant Period	J. E. Bickel Share	
							%	\$
1	J. E. Bickel	None	Project 20K: Quantifying System Reliability to Inform Concept Selection	BP America Production Company	No	6/1/13-8/31/14	100%	\$186,917
2	V. Rai	J. E. Bickel (Sr Person)	Towards an Emergent Model of Tech Adoption for Accel. the Diffusion of Residential Solar PV	Department of Energy Wells for Improved Recovery (Norway)	Yes	6/1/13-8/31/16	6%	\$29,526
3	J. E. Bickel	None	Real-time Steering Decision during Drilling	Wells for Improved Recovery (Norway)	No	10/15/12-8/31/14	100%	\$69,325
4	E. Schneider	J. E. Bickel & D. Morton	Support for Risk-Informed Security Analysis Meth w/ App. to Small Modular Reactors	Sandia National Labs	No	7/1/12-5/31/13	40%	\$44,000
5	J. E. Bickel	None	Quantifying the Benefit of CCS Monitoring and Verification Technologies	BP America Production Company	No	7/18/12-8/31/13	100%	\$44,560
6	J. E. Bickel	None	CAREER: Accurate and Efficient Modeling of Probabilistic Dependence	National Science Foundation	Yes	2/28/15	100%	\$400,000
7	J. Duncan	J. Nicot, C. Yang, J. E. Bickel	Developing Comprehensive Risk Assessment Frameworks for Geological Storage of CO2	Department of Energy—NETL	Yes	9/1/09-8/31/14	7%	\$142,406
8	D. McVay	J. E. Bickel	Optimizing Development Strategies to Increase Reserves in Unconventional Gas Reservoirs	to Secure Energy for America (DOE)	Yes	9/1/08-12/31/11	48%	\$188,602
9	J. E. Bickel	None	SGER: Resource Allocation and the Value of Information	National Science Foundation	Yes	9/1/08-12/31/10	100%	\$120,000
			While at UT Austin			Sub-total	32%	\$1,225,336
10	J. E. Bickel	D. McVay, R. Gibson	Quantifying the Value of Seismic Information Phase 2	Schlumberger	No	9/1/06-8/31/07	60%	\$75,000
11	J. E. Bickel	D. McVay, R. Gibson	Quantifying the Value of Seismic Information	Schlumberger	No	9/1/05-8/31/06	60%	\$30,000
12	J. E. Bickel	None	Copulas and Energy Commodity Pricing	Suez Energy Marketing	No	1/1/05-5/31/05	100%	\$15,000
						Grand Total	34%	\$1,345,336

TABLE 3: INTERNAL AND JOINT INDUSTRY PROJECT FUNDING SOURCES

#	PI	Co-PI(s)	Title	Sponsor	Peer Review	Period	J. E. Bickel Share	
							%	\$
13	J. E. Bickel	None	Applied Projects in OR Project Class	DrillingInfo	No	1/1/13-5/31/13	100%	\$10,000
14	J. E. Bickel	None	Center for Petroleum Asset Risk Management (CPARM) Membership	Weatherford International	No	9/1/12-8/31/13	100%	\$50,000
15	J. E. Bickel	None	Center for Petroleum Asset Risk Management (CPARM) Membership	Kuwait Oil Company	No	9/1/12-8/31/14	100%	\$100,000
16	J. E. Bickel	None	Management Science and Engineering Undergraduate Certificate Program	UT Austin (ME PROCEED Program)	No	4/1/10-8/31/15	100%	\$20,000
17	J. E. Bickel	None	Summer Research Assignment	UT Austin	Yes	6/1/09-7/31/09	100%	\$25,000
18	J. E. Bickel	None	Graduate School Diversity Mentoring Fellowship	UT Austin	Yes	9/1/09-8/31/10	100%	\$24,000
			While at UT Austin			Sub-total	100%	\$229,000
19	J. E. Bickel	None	Pathways to Doctorate Program	Texas A&M	Yes	9/1/06-8/31/07	100%	\$25,000
						Grand Total	100%	\$254,000

³ In one case (# 2 in Table 2) I am Senior Personnel, where my share is \$29,526. The \$394,606 grant from RPSEA (#8 in Table 2) includes \$80,000 in cost share from Pioneer Natural Resources; my share of \$188,602 includes \$40,000 of this cost share.

EXHIBIT 61

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: 9/4/13**RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS**Name: Andreas Gerstlauer Present Rank: Assistant ProfessorYears of Academic Service (*Include AY 2013-14 in each count*):At UT Austin since: 9/1/08 In present rank: 6; In Probationary Status (TT only): 6
(m/d/y) (# of years) (# of years)Department: Electrical and Computer Engineering

Other:

College/School: Cockrell School of EngineeringRecommended action¹:By Budget Council/Executive Committee: Promote to Associate ProfessorVote² for promotion 26; Against 0; Abstain 0; Absent 8By Department Chair: Promote to Associate Professor

By SBS Executive Committee:

Vote² for promotion _____; Against _____; Abstain _____; Absent _____

By Director:

By College/School Advisory Committee: PromoteVote² for promotion 7; Against 0; Abstain 0; Absent 0By Dean: PromoteAdministrative Action: Promote to Associate ProfessorDate Action Effective: September 1, 2014

(To be submitted to the Board of Regents as part of the annual budget.)

By:

Date: 12/16/2013

For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.²All votes are to be recorded as For, Against, or Abstain. (Note: unexplained abstentions will be interpreted as weak negative votes by the President's Committee.) Also record number of absent eligible voting members.

Dean's Assessment

Andreas Gerstlauer

Department of Electrical and Computer Engineering

Andreas Gerstlauer received his Vordiplom (BS) and Dipl.-Ing (MS) in Electrical Engineering from the University of Stuttgart, Germany in 1991 and 1997, respectively, and an MS and Ph.D. in Information and Computer Science from the University of California, Irvine in 1998 and 2004, respectively. He continued at UC Irvine as an assistant researcher until he was appointed an assistant professor at UT Austin in 2008.

Ten external letters were submitted as part of the promotion dossier, five were suggested by the candidate and five were selected by the budget council. Eight reviewers are faculty at US universities, one is a faculty member at a European university, and one is a senior technical staff member in industry. One reviewer is a member of NAE.

Teaching

Dr. Gerstlauer has taught one undergraduate course and two graduate courses: EE 319K, *Introduction to Embedded Systems* (four times); EE 382V *Embedded System Design and Modeling* (four times); and EE 382V *System on a Chip* (three times). His average overall instructor/course ratings for these courses are 4.05/3.78, 4.20/3.55, and 4.33/3.87 respectively. Dr. Gerstlauer's ratings compare favorably with the weighted average/median instructor ratings for assistant professors in the Department of Electrical and Computer Engineering over the last five years (4.06/4.08 for undergraduate courses) and (4.22/4.36 for graduate courses).

In collaboration with Professors Yerraballi and Valvano, Dr. Gerstlauer is developing a massively open online course (MOOC) based on EE 319K. This course will be delivered through the edX consortium during the 2014 spring semester and will include a physical hardware laboratory component. This is believed to be the first time that a MOOC will include a laboratory component using physical hardware, as opposed to simulations of hardware.

Research

Dr. Gerstlauer's research is in the area of system-level design of embedded computer systems, with a focus on design automation methodologies, technologies and tools. His primary focus has been on tools for modeling systems-on-a-chip that are embedded in a variety of products, from consumer electronics to civilian spacecraft and military systems. Dr. Gerstlauer's methods and tools provide assistance for teams of designers in making key decisions and automating the design of the entire computing system based on the design decisions.

At UT, Dr. Gerstlauer has published nine archival journal papers (eight in print and one accepted), 32 peer-reviewed conference papers (these conferences have acceptance rates in the range of 17 to 34%). His career totals are 12 archival journal papers, 54 peer-reviewed conference papers, and three co-authored books.

Dr. Gerstlauer's extramural research funding in rank includes nine grants and four gifts, totaling nearly \$2.2 million (his share is \$1.4 million). The research grants have been funded by federal agencies (National Science Foundation, DARPA, and Army Research Office) and industrial groups (Semiconductor Research Corporation, Samsung). He is the principal investigator on ten of these research grants/gifts.

The letters from external reviewers are consistently strong. Dr. Gerstlauer's specific contributions to the field and the impact of his work are well documented.

Dr. Arvind (Massachusetts Institute of Technology, NAE) writes, "There is a good balance between *tools* versus *design* papers. For me Andreas['] work would lack credibility without the design papers. The topics covered by these papers are of central concern in ESL [embedded computer systems]. I also found the architecture modeling paper and the OS paper together offering some creative insights in a difficult modeling question."

Dr. Nikil Dutt (University of California, Irvine) writes, "After joining UT Austin, Dr. Gerstlauer has continued to build on this momentum by creating abstractions for RTOS modeling for heterogeneous multi-core platforms, hardware-dependent software design methodologies, and transaction-level modeling for efficient exploration of communication architectures. His recent work on speeding up system-level simulation and embedded software modeling already show early signs of impact both in the research arena, as well as for industrial practitioners."

Dr. Milos Ercegovac (University of California, Los Angeles) writes, "These works are typical of his research: there is a clear, original idea, a good technical depth, and strong experimental results. Prof. Gerstlauer and his collaborators made notable contributions in identifying key principles of electronic system design, covering both hardware and software aspects."

Dr. Peter Hofstee (IBM Austin Research Laboratory) writes, "... what most impresses me about Dr. Gerstlauer's work, is on the one hand a rigorous drive for the abstraction and elegance one expects of academic research with lasting value, and at the same time a high degree of completeness and realism that allows his research to be readily applicable. It is unusual to see this span of interest and capability within a single researcher."

Dr. Martin Wong (University of Illinois at Urbana-Champaign) writes, "... Andreas has established a diverse and high-quality research program that is certainly on par with if not better than any of his peers'." "... Andreas is highly visible, well known and respected in the broader automation community."

Advising and Student Mentoring

At UT Austin, Dr. Gerstlauer has graduated [REDACTED] co-supervised PhD students, [REDACTED] MS thesis students [REDACTED] and five MS report students. He is currently supervising or co-supervising seven PhD students and [REDACTED] MS students. He has also served as the faculty advisor to several upper-division undergraduate students in Computer Engineering and Embedded Systems tracks.

University Service

Dr. Gerstlauer has served on several committees within the Department of Electrical and Computer Engineering. He has been actively engaged with the undergraduate curricula and with graduate student recruiting and admissions. He also served on the faculty search committee one year.

Professional Service

Dr. Gerstlauer is an associate editor for *Transactions on Embedded Computing Systems* within the Association for Computing Machinery (ACM) and he serves on the editorial board for *Design Automation for Embedded Systems* (SpringerLink). He has also served on the technical program committee for several technical conferences.

Other Evidence of Merit or Recognition

In 2013, Dr. Gerstlauer's work [REDACTED]

Overall Assessment

Dr. Gerstlauer has developed a strong research program with a high level of publication productivity; he has secured a sustainable level of research funding from federal and corporate sources; and the quality and impact of his research are highly regarded by the external reviewers. His teaching contributions at the undergraduate and graduate level are strong.

Accordingly, I recommend promotion of Andreas Gerstlauer to associate professor with tenure.



Sharon L. Wood, Interim Dean
2 November 2013

ANDREAS GERSTLAUER
Statistical Summary for In-Rank

Peer-reviewed Journal Publications	9
Peer-reviewed Conference Publications	32
Corresponding Author on Peer-Reviewed Publications	4 (3 invited)
Total Citations of all Publications (career)*	2135
h-index (career)*	21
Total Research Funding	\$2.17M
Candidate Share Research Funding	\$1.39M
Total Number of Grants/Contracts Received	13
Number of Grants/Contracts Received as PI	10
PhD Students Completed †	███████████
MS Students Completed †	7.5
PhD Students in Pipeline (as of 09/2013) †	6
MS students in Pipeline (as of 09/2013) †	████
Courses Taught	11
Weighted Average UG Course GPA	3.04
# of Students Taught	409
Average Instructor Evaluation UG	4.10
Average Instructor Evaluation Grad	4.23
Average Course Evaluation UG	3.74
Average Course Evaluation Grad	3.79
Teaching Awards	0
Student Organizations Advised	2
Undergraduates Supervised	11
Department Committees and Service	9
Cockrell School Committees	0
University Committees and Service	0
Journal Editorial Boards	2
Journal Reviews/Number of Journals	34 / 13
Symposia Organized	4
Invited Talks	33

* Source:

- Publish or Perish
- ISI Web of Knowledge

† Counted as 1 if sole advisor, 0.5 if co-advised

Budget Council Assessment of Teaching Performance for Faculty Promotion Candidate
Andreas Gerstlauer

This report was prepared by Budget Council Members Professors Jonathan Valvano and Yale Patt, and is their personal evaluation of Professor Andreas Gerstlauer's teaching record.

Principal Areas of Teaching

Dr. Gerstlauer's principal area of research and teaching is in system level design of embedded systems. This involves the holistic design of both hardware and software to solve a domain specific computer problem, and requires applying engineering tradeoffs in accomplishing this goal. To that end, he teaches both graduate and undergraduate courses. He has focused his undergraduate teaching on EE319K, a core freshman course on hardware/software interfacing, which includes both software development and system integration of hardware and software components. At the graduate level, he has focused his attention on two courses, a new graduate course in "Embedded System Design and Modeling," (ESDM) which he developed and introduced at UT, and an existing lab-based course, "System on a Chip," (SoC) which he took over and overhauled. EE319K is required of all freshman majors in electrical and computer engineering. It is the first course wherein the student is faced with writing programs that interface the hardware and the software of an embedded system. The two graduate courses are fundamental for students wishing to either pursue a PhD in embedded systems architecture or assume leadership positions on design teams in industry.

Teaching Evaluation Procedures and Measures

The ECE department employs two teaching evaluation procedures: Course Instructor Surveys and peer evaluation. The course instructor surveys are conducted in the last three weeks of the semester in every course. A peer evaluation is made by a professor after a visit to the classroom. The time and date of the visit are agreed to beforehand so that the visit does not catch the instructor by surprise.

Summary of Course Instructor Surveys

The primary indicator on the Course Instructor Surveys used to evaluate teaching performance is the Overall Instructor Rating. Dr. Gerstlauer's evaluations are shown in the table below.

Class	Level	Semester	Enrollment	Instr. Rating	Course Rating
EE319K	Undergraduate (freshmen, required)	Spring '09	38	4.1	4.2
		Spring '11	84	3.7 [†]	3.3 [†]
		Spring '12	73	4.3	3.7
		Spring '13	71	4.1	3.9
EE382V ESDM	Graduate (introductory)	Fall '08	19	4.4	3.8
		Fall '09	26	3.8	3.5
		Fall '10	15	4.1	3.9
		Fall '11	14	4.5	3.9
EE382V SoC	Graduate (introductory)	Spring '10	18	4.6	4.3
		Spring '11	10	4.2	3.6
		Fall '12	41	4.2	3.7

* Average/median/standard deviation of instructor ratings for ECE tenured/tenure-track faculty is 4.06 / 4.08 / 0.42 for undergraduate courses, 4.22 / 4.36 / 0.37 for graduate courses, and 4.12 / 4.04 / 0.29 for EE319K.

[†] An electronic course evaluation was performed, but only 26 responses were collected.

The table lumps his teaching performance into three sections, one section for each of the three courses he has taught.

It is clear that the students consider Dr. Gerstlauer an outstanding teacher. Of the eleven classes he has taught, nine of them are ranked at 4.1 or higher. Two classes were ranked below 4.0, the freshman course EE319K in Spring, 2011 (3.7), and the graduate Embedded Systems Design and Modeling course in Fall, 2009 (3.8). Given the overwhelming positive evaluations in all three courses, we see the two courses below 4.0 as outliers, and hence, we do not have reason for concern.

In fact, one of the outliers, the 3.7 evaluation for EE319K in Spring, 2011, can be explained easily. The course was evaluated electronically with only 30% of the students in the class participating in the evaluation. Normally, we use paper evaluations, and normally a much higher percentage of the students in each class participate.

Summary of Peer Evaluation

Dr. Gerstlauer's classes were evaluated by both of us, Professor Jonathan Valvano performing the peer evaluation in March, 2012, and Professor Yale Patt performing the peer evaluation in March, 2013. Both of us rank Dr. Gerstlauer as an outstanding teacher, citing his clear explanations, comfortable manner in the classroom, and his effective use of both the blackboard and technology in getting his points across. These evaluations are included in the promotion packet.

Comparison with other instructors in the ECE Department

EE319K is a very demanding, but critical, course required of all ECE majors during their freshman year. As such, the ECE department has assigned the course to instructors who are known for being conscientious and excellent teachers. Not surprising, even though the course requires a lot of effort from students, it is a popular freshman course and routinely receives positive evaluations.

Listed below are the CIS evaluations for the six instructors who have been teaching the course since 2009.

This is the most appropriate course to use as a metric to compare Professor Gerstlauer with his peers for two reasons: (1) it is the undergraduate course that he has focused on, and (2) the sample size is large enough (1744 students, 29 classes) to provide meaningful data.

His CIS instructor average numbers are right at the overall average of 4.1. His CIS course numbers are slightly below the overall average of 3.9. His class GPA is slightly lower than the overall average GPA of 3.07, suggesting there is no bias in evaluation scores caused by perceived grade expectations. This data places him right at the average among the excellent instructors teaching this course.

Gerstlauer		Professor 1		Professor 2	
CIS Instructor	4.1	CIS Instructor	3.9	CIS Instructor	3.7
CIS Course	3.8	CIS Course	3.9	CIS Course	3.8
GPA	3.03	GPA	3.13	GPA	3.00
Class Size	59	Class Size	41	Class Size	53
Professor 3		Professor 4		Professor 5	
CIS Instructor	4.1	CIS Instructor	4.2	CIS Instructor	4.5
CIS Course	3.9	CIS Course	4.0	CIS Course	4.0
GPA	3.19	GPA	3.04	GPA	3.05
Class Size	50	Class Size	68	Class Size	67

Table. CIS/GPA data since 2009 of all EE319K instructors (source. CIS, www.myedu.com). Professor Gerstlauer's data are highlighted.

Massively Open Online Course (MOOC)

The University of Texas at Austin will deliver nine online classes in the MOOC format during the 2013-2014 academic year. EE319K will be one of these pilot classes, with a scheduled launch in Spring 2014. Professor Gerstlauer is one of three faculty (along with Ramesh Yerraballi and Jonathan Valvano) involved in the design and delivery of this online class. In particular, his role to date has been overall course design, selection of topics for inclusion, and review of teaching materials. Professor Gerstlauer's role has been restricted over the summer as he focuses on his promotion package. During the fall semester leading up to the Spring 2014 launch he will take a more active role in design and creation of educational content.

Balance Between Graduate and Undergraduate Teaching

Dr. Gerstlauer's teaching load was two courses per year during his first two years on the ECE faculty (2008-09, 2009-10), three courses per year (2010-11, 2011-12), and two courses per year, starting in Fall, 2012. This is consistent with ECE's normal policy toward teaching loads, wherein new assistant professors were assigned two courses per year during their first two years on the faculty, and three courses per year for research active faculty after that. Starting in Fall, 2012, all research active faculty have been assigned two courses per year.

Dr. Gerstlauer has achieved a commendable balance between undergraduate and graduate teaching. He has taught the freshman course four times and his two graduate courses a total of seven times.

Individual Instruction

Dr. Gerstlauer has an excellent record in the area of individual instruction, and has gone out of his way to do more than his share when it comes to taking on responsibilities involving individual instruction.

Dr. Gerstlauer has been the co-advisor of █ students who have completed their PhDs at UT. He has also been the co-advisor of two students who completed their PhDs elsewhere. He also served on the PhD dissertation committees of eight students who completed their PhDs at The University of Texas, and two students who completed their PhDs at universities in Germany. He is currently advising five PhD students at UT as the sole advisor, plus █ additional PhD students as co-advisor.

Dr. Gerstlauer has also supervised █ completed MS theses and 5 MS reports. He is a member of the PhD dissertation committees of ten PhD students at UT. He is a member of the MS thesis committees of █ MS students at UT, one MS student at UC Irvine, and three MS students at universities in Germany. He is a member of the MS Report committee of █ MS students at UT.

The ECE department has a graduation requirement wherein every student must participate in a senior design project. Projects are done by four or five person teams and take two semesters to accomplish. The members of each team meet weekly throughout the two semesters with their faculty mentor. Dr. Gerstlauer has mentored two undergraduate senior design projects.

Teaching Portfolio

Dr. Gerstlauer has prepared an 8-page teaching philosophy statement which expresses in depth his attitude toward teaching and his views on what it takes to do effective teaching. He discusses how his views have evolved over the time he has been teaching.

Dr. Gerstlauer has also prepared a comprehensive portfolio of the teaching materials used in his three courses. They are included in this promotion packet.

Conclusion

In summary, while in rank as an Assistant Professor at UT Austin, Dr. Gerstlauer has delivered very high quality teaching at all student levels, both in formal classes and in supervision of individual work. He is well deserving of tenure and promotion to the rank of Associate Professor.

Respectfully,


Jonathan W. Valvano
Professor of Electrical and Computer Engineering, and
Engineering Foundation Centennial Teaching Fellow in Electrical Engineering #1


Yale N. Patt
Professor of Electrical and Computer Engineering,
Ernest Cockrell, Jr. Centennial Chair in Engineering, and
Distinguished University Teaching Professor

Statement on Research

Revised August 26, 2013

Grants and Contracts Awarded while in Rank

Co-Investigators	Title	Agency	Project Total	Candidate Share	Grant Period
-	Core Technology Development for System Simulation including Network	Samsung, Korea	\$149,020	\$149,020	6/1/2013-12/31/2013
-	Automated Design Space Exploration and Optimization of DSP Systems	National Instruments	\$60,000	\$60,000	8/1/2012-7/31/2013
Robert Heath (PI, ECE)	Interference Alignment in Distributed Environments	Army (ARO)	\$99,980	\$49,990	9/1/2012-8/31/2013
Lizy John, (Co-PI, ECE)	Multi-dimensional Modeling, Design and Exploration of Heterogeneous Multicore SoCs	SRC	\$345,000	\$173,000	8/1/2012-7/31/2015
Robert Heath (PI, ECE)	Interference Alignment in Distributed Environments	DARPA	\$99,344	\$49,672	9/1/2011-8/31/2012
-	Towards Enabling Full-Cell Biochemical Network Simulations	UT Austin, SRA	\$20,000		7/1/2011-8/31/2011
Robert van de Geijn (Co-PI, CS)	SHF: Small: Algorithm/Architecture Co-Design of Low Power and High Performance Linear Algebra Compute Fabrics	NSF	\$499,919	\$249,959	6/1/2012-5/31/2015
Michael Orshansky (Co-PI, ECE)	SHF: Small: Formal Synthesis of Low-Energy Signal Processing Systems Relying on Controlled Timing-Error Acceptance	NSF	\$449,614	\$224,807	9/1/2010-8/31/2013
-	Automatic Platform Model Calibration and Tuning	SRC	\$254,337	\$254,337	8/1/2010-7/31/2013
			\$1,977,214	\$1,230,785	

EXHIBIT 62

August 2018

**2018-19 Evaluation Template
Cockrell School of Engineering
Promotion and Tenure Committee**

Name of Faculty Member: Evdokia Nikolova

Department: ECE

Current Rank: Assistant Professor

1.0 TEACHING

- Taught one undergraduate course (EE 360C: Algorithms, 60-80 student) and two graduate courses (EE 381V: Advanced Algorithms, ~25 students, EE 381V: Game Theory, ~16 students) while in rank at UT
- Average CIS for undergraduate courses: 3.9 instructor, 3.5 course. Department averages for this course are 3.8 and 3.7
- Average CIS for graduate courses: 4.1 instructor, 3.9 course
- Three separate peer teaching evaluations were positive and pointed out only minor areas for improvement
- Prof Nikolova addressed concerns raised in students' comments and explained that many of the more negative comments were related to issues with the TAs
- Overall, Prof Nikolova seems to be a good teacher who fills important needs for the department
-

2.0 RESEARCH

- Prof Nikolova studies optimization approaches and game theory applications that involve human element and risk aversion. Her work addresses interesting problems in unique ways that have important implications for societal and policy making. An example of this work is the problem of identifying the best path between two locations while also taking into account risk tolerance. For example her work could consider the optimal route to a destination that considers the high degree of variability of a certain route may not be worth the risk associated with taking that route.
- Prof Nikolova is considered a leader in this emerging area of optimization work

A. Publications

- 3 journal publications published in rank (4 total)
- 18 peer reviewed conference proceedings (30 overall)
- The majority of her work is published in competitive, peer reviewed conference proceedings rather than journal articles. The conferences have acceptance rates around 30% or lower
- 923 citations with an h-index of 17 (google scholar)
- Majority of publications and conference proceedings are with graduate students and postdocs

August 2018

- Comparison with peers at top institutions suggests comparable h index and slightly lower total citations than peers, but this difference is likely due to time effects since Prof Nikolova received her PhD after the peers.

B. External Letters

- 9 letters were requested and all 9 were received. 5 were from the department and 4 were suggested by the candidate. One is NAE & NAS (Yannakakis, Columbia)
- All letter writers are from peer institutions and come from a range of departments including computer science, operations research, industrial engineering, business management, mathematics of operations research and electrical engineering
- All letters are positive and recommend promotion
- Alper Atamturk (Berkeley)
 - "She has raised many new questions and put forth conjectures that have raised the interest in the research community"
- Vincent Conitzer (Duke)
 - "Simply put, Dr Nikolova is one of the world's leading junior researchers working in the intersection of fields including operations research and theoretical computer science and ECE"
 - Her work "has already had significant impact but I think it will have much more impact yet in the future"
- Ashish Goel (Stanford)
 - "Professor Nikolova has a high potential for future professional growth and leadership. One sure sign of this is her mentorship of PhD students. I am very pleased to note that one of her students received a best student paper award for work co-authored with her at a competitive and prestigious conference"
- Patrick Jaillet (MIT)
 - On her research record: "Let me simply mention that this aspect of the portfolio looks very favorable compared to all the cases I have been looking at (at MIT and elsewhere)"
 - On her publications: "I consider these papers to be first-rate and typical of the work published by Prof Nikolova: rigorous and mathematically sound, introducing novel ideas to some classical problems, with the aim to understanding fundamental properties. This is very high-quality work."
 - "Restricting myself to the last few years, I can say that her record is in par with the recently tenured cases that I have been asked to review (at Georgia Tech, USC, MIT and Northwestern). Over a fifteen year period, I would put her in the top 20% of all those I have evaluated and subsequently received tenure"
- Sampath Kannan (U Penn):
 - "I am a fan of this main line of Evdokia's research for a number of reasons: 1) She breaks new conceptual ground in her problem choice. 2) She models a very real situation and does so without oversimplifying the model for the sake of computational tractability ..."

August 2018

- “Her rising citation count is a clear signal that her body of work on risk aversion is having a big impact. I strongly recommend her for tenure.”
- Andreas Schulz (TU Munich):
 - On her publications: “they are scholarly and eloquently written”
 - “She may not have what one may typically consider a home run paper, but with meticulous work she has certainly helped to bring this research direction forward”
- Shmoys (Cornell)
 - “The impact of Nikolova’s body of research is starting to really gain in traction. I expect that the two papers mentioned above, which are quite recent, will generate quite a bit of follow up work by a cross section of researchers”
 - “I expect that her record is roughly consistent with the expected achievements required for tenure”
- Pascal van Hentenryck (Georgia Tech)
 - “She is highly visible in the field and beyond, which is unusual for someone at this stage of her career”
 - “I believe she would have been awarded tenure and promotion easily in all institutions I have been part of. This includes Computer Science at Brown University where I was a professor for 20 years, the IOE and EECS departments of the University of Michigan, and the school of Industrial and Systems Engineering at Georgia Tech”
- Mihalis Yannakakis (Columbia)
 - Refers to one of her recent papers as “a very nice paper”
 - “I recommend her promotion to Associate Professor with tenure”
 - Overall, this letter sounds less enthusiastic than the others. There is nothing negative, but it doesn’t include many glowing statements of praise like most others

C. Research Funding

- Total funding in rank: \$2.6M, \$1.65M share
- Funding at UT: 2 NSF grants including CAREER Award
- One current grant through 2021

D. Patents

- No patents at UT or A&M. 4 from prior work.

3.0 ADVISING AND STUDENT MENTORING

- 1 PhD student graduated, 6 PhDs in progress
- 2 postdocs (1 former, 1 current)
- Undergraduate supervision consists of senior design teams

4.0 UNIVERSITY SERVICE

- DICE area admissions committee
- Department junior faculty hiring committee
- Active participant in Edison Lecture Series at UT

August 2018

5.0 PROFESSIONAL SERVICE

- Active in conference organizing. Served as program chair of the 2014 Winedale workshop, which is by invitation and is prestigious.
- Co-organized workshop at the Simons Institute for the Theory of Computing at Berkeley, which is a prestigious institute that attracts famous scientists and mathematicians. This was noted by several letter writers as a significant honor as well as service.

6.0 AWARDS

- NSF CAREER Award (2014)
- Selected as co-organizer of workshop at the Simons Institute.
- Google faculty award (2013)
- Best student paper award at IEEE international Conference on Acoustics, Speech and Signal Processing in 2018. This is a top conference.

7.0 OVERALL

- Overall, this is a very strong case. Letter writers, department chair, and budget council all praise her innovative research and the significant impact that it has and will have.
- The only minor issue is that her teaching has been adequate but not stellar. However, CIS scores are comparable with departmental averages for these courses, so this is a minor concern.

EXHIBIT 63

Message

From: Christine Julien [c.julien@utexas.edu]
on behalf of Christine Julien <c.julien@utexas.edu> [c.julien@utexas.edu]
Sent: 2/20/2019 3:14:48 AM
To: Thomaz, Andrea L [athomaz@ece.utexas.edu]
Subject: Re: [cse-ece-faculty] P&T decision

Oh, sheesh. It's so complicated. And has been handled badly on so many levels. LONG LONG stories. Sorry for not bringing you in the loop sooner, but this was not a surprise to me, unfortunately.

Drinks some time? Dinner? What's your schedule like? Would your fam want to come for dinner sometime? OK to have that conversation in front of Edison? I'm really worried about the impact of her email on the assistant professors...

On Tue, Feb 19, 2019 at 9:05 PM Thomaz, Andrea L <athomaz@ece.utexas.edu> wrote:

Wha?! I'm so out of the loop...poor thing, how did this happen? I feel somehow responsible for not being a better mentor sooner :(

~Andrea

Sent from a tiny keyboard ...

Begin forwarded message:

From: Evdokia Nikolova <nikolova2009@gmail.com>
Date: February 19, 2019 at 5:30:11 PM CST
To: ECE faculty <engr-ece-faculty@utlists.utexas.edu>
Subject: [cse-ece-faculty] P&T decision
Reply-To: Evdokia Nikolova <nikolova2009@gmail.com>

Colleagues,

I feel compelled to address the elephant in the room and share with you the outcome of my tenure case: it is "do not promote". While successful cases are celebrated, unsuccessful ones are not even mentioned. They are only discussed in a secretive manner; I do not wish that to be the case for mine. Perhaps an open discussion can improve my own understanding of just what exactly happened and why.

In brief, I had a strong departmental vote to promote; a strong recommendation from our department chair Ahmed to promote and a unanimous recommendation to promote from the School of Engineering committee. The Dean's recommendation "do not promote" came unexpected and in sharp conflict with the prior recommendations, particularly for its reasoning, contradicting what I was told in annual reviews and in my third year review in terms of what I should work on to have a successful tenure case. For those that are interested to read it, I have attached the Dean's assessment here, as well as a rebuttal I wrote in response, which was included in my promotion file but clearly did not make a difference at the President's Committee level. I wonder if it was even read.

My understanding of the situation is as follows:

1) The Dean and/or President seem to have a very different set of promotion standards from the department. This is something that makes junior faculty especially vulnerable and that essentially sets them up for failure. If two perfectly promising junior faculty in the department are not granted tenure in two consecutive years, to me this speaks of serious issues at the department, college and university, some of which I understand and some of which I do not. (The part I do not understand is what exactly upper administration is thinking.)

Especially damaging is that the different set of promotion standards by upper administration are not openly articulated ahead of time. It forces junior faculty to play a game for which the rules are not known and can even be picked adversarially on a case by case basis; articulated (perhaps only partially) only after the junior faculty is told they have lost. In my case the Dean's biggest issues *after the fact* seem to have been funding and teaching---information that she had last spring in the Dean's summary sheet and additional funding sheet she specifically requested yet she raised no concerns about them at that time.

2) Another issue that is very serious for junior faculty that arrive at UT with prior faculty experience is the lack of transparent policy from upper administration on the meaning of the tenure clock. When I interviewed, I was told that UT gives a standard 5-year contract to all incoming assistant professors, regardless of having prior in-rank experience or not and that is a positive since one can go up earlier than the 5 years, whenever one is ready (the implication being that they are evaluated with respect to a "normal," not higher tenure bar) but it also provides a cushion in case one needs more time. Thus, my expectation, having arrived at UT after 2.5 years faculty experience at Texas A&M was that I would be considered for promotion around 2.5 years after joining UT. My expectation changed, however, as I started receiving conflicting information as the years went by. On the one hand, I was told that an "early case" is subject to a higher tenure bar. On the other hand, I was told that a "technically early case" i.e. one that is early by the UT clock but not early when including prior faculty experience, is not subject to a higher tenure bar.

The Dean's letter seems to be doing something in between, taking the worst of both worlds---holding me to a higher bar while at the same time counting my prior faculty experience, essentially for the purpose of holding it against me (arguing that I obtained 70% of my funding from my first years in rank while at Texas A&M).

In essence I am being held to a much higher standard. If one is expected to achieve amount X on a 5 year clock, req of showing a positive trend plus being put on a 7 or 9 year clock means they are expected to show 1.5X or 2X amount of work and achievements in order to qualify for tenure. How exactly is this reasonable or fair?

3) Regarding positive trends: requiring a positive trend in funding tracked on an annual basis is fundamentally flawed in my opinion (and again something I was never told as an expectation for tenure). For one, sometimes funding opportunities come in waves. That was my case—the first couple of grants I received were from unique interdisciplinary funding programs that did not exist later on. I had planned on applying for grants later in my career after gaining more experience but when I learnt that these opportunities would not be there later, I decided to give them a shot—and was fortunate to receive them. As everyone knows, funding programs come and go and the funding landscape changes continuously.

It seems a junior faculty should be congratulated and not punished for their early success and held to a meaningless and artificial higher standard because of this success: the grants I obtained in my first three years in rank were more than sufficient to support my research agenda for the 7.5 years I have been Assistant Professor so far. Nevertheless, I attained further funding in 2017 that I have not yet used and that will sustain my research group for the next 2.5 years.

In terms of promotion expectations it seems reasonable to say that one should have enough funding to sustain an excellent research agenda, which was apparently the previous UT President's stand. An insistence on obtaining more money than one needs for their already excellent research agenda (as assessed by all my external letters) simply for the sake of showing a positive trend, is invariably going to take away from the time and achievements in other aspects of the job—research, teaching or service. Hence my conscious decision was not to apply for funding unnecessarily and I spent my time on building my research instead.

4) I was always told that the most important factor in a tenure portfolio in a Tier 1 research university would be my research accomplishments as evidenced by top-tier publications, citations and external letters. These accomplishments as detailed in my case seem to have been notably downplayed in the Dean's letter and President's decision.

Ethically, I think all current and future junior faculty candidates should be told about my case and its outcome so they have the correct information on promotion statistics and timeline to advancement in the department. They also need to be advised to ask both Ahmed and the Dean during their interview or post-offer visits what the criteria are for successful promotion so they understand early on if there are discrepancies. Candidates with prior faculty experience should be specifically alerted regarding the double standard and unclear expectations for "early" promotion. I hereby give permission to anyone to discuss my case publicly. In addition, if anyone wishes to see more details, I am willing to share my full dossier.

Since I am still puzzled by the reasoning to the "do not promote" decision in the Dean's letter, I have to conclude that the Dean did not want to promote me simply because she was able to delay my advancement and she decided to do so. The sentence in her statement "If this were an up-or-out case, I would likely agree with the recommendation of the Promotion and Tenure committee" speaks for itself.

Needless to say, after all the effort, achievements and years of waiting to be considered, this outcome is disappointing and demoralizing, and additionally I consider it deeply unfair. Even though the "do not promote" outcome means that I am not terminated at this time and have the right to reapply for tenure, I do not feel valued and thus do not intend to subject myself to the UT tenure process again.

On a final note, it is hard not to notice that I was the only woman among the six promotion candidates and the only candidate who was not able to advance. I also so far seem to hold the track record for longest time in the rank of Assistant Professor---and after the current decision will likely not have any contenders in the foreseeable future. Anecdotally, it is my impression that women in this department have a longer time to advancement, if they pass through that hurdle at all. Each case has its own reasons, no doubt. Perhaps there is

no evidence for discrimination but it is nevertheless food for thought. Good luck to the few remaining women in the department.

--

Evdokia Nikolova

<http://users.ece.utexas.edu/~nikolova/>

<Nikolova - Dean Statement_high-lighted.pdf>

<Nikolova-Rebuttal-Dec16-2018.pdf>

<Nikolova Notification.pdf>

EXHIBIT 64

Handbook of Operating Procedures 3-3020

Nondiscrimination Policy

Effective October 12, 2018

Executive Sponsor: Vice President for Diversity and Policy Owner: Executive Director - Office for Community Engagement Inclusion and Equity

I. Policy Statement

It is the policy of The University of Texas at Austin ("University") to provide an educational and working environment that provides equal opportunity to all members of the University community. In accordance with federal and state law, the University prohibits unlawful discrimination, including harassment, on the basis of race, color, religion, national origin, sex, pregnancy [1], age, disability, citizenship, veteran status and genetic information. The University also prohibits discrimination on the basis of, sexual orientation, gender identity, and gender expression. Procedures for filing discrimination complaints on the basis of sex, including sexual harassment, are addressed by [HOP 3-3031](http://www.policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct) (<http://www.policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct>). In this policy, the terms sex and gender are interchangeable.

Inquiries regarding this policy may be directed to the Office for Inclusion and Equity at 512-471-1849 or oie@austin.utexas.edu (<mailto:oie@austin.utexas.edu>).

II. Reason for Policy

This policy provides information regarding the University's prevention and education efforts related to discrimination and harassment. The policy also explains how the University will proceed once it is made aware of the allegations of prohibited conduct in keeping with the University's values and in order to meet the legal obligations of Title VI, Title VII, and Title IX, and other applicable laws.

III. Scope & Audience

This policy applies to visitors, applicants for admission to or employment with the University, students, and employees of the University who allege discrimination by University employees, students, visitors, or contractors. [2]

IV. Definitions (specific to this policy)

Complaint:

Complaint means a signed document or other report, including verbal reports (if appropriately acknowledged), alleging a violation of this policy.

Complainant:

Complainant means a person who submits a complaint alleging a violation of this policy.

Discrimination:

Conduct directed at a specific individual or a group of identifiable individuals that subjects the individual or group to treatment that adversely affects their employment or education because of their race, color, religion, national origin, sex (including pregnancy), age, disability, citizenship, veteran status, sexual orientation, gender identity, or gender expression.

Harassment:

Exhibit
John Dalton

60

06/9/2021 JL

As a form of discrimination is defined as verbal or physical conduct that is directed at an individual or group because of race, color, religion, national origin, sex, pregnancy, age, disability, citizenship, genetic information, veteran status, sexual orientation, gender identity, or gender expression when such conduct is sufficiently severe or pervasive so as to have the purpose or effect of interfering with an individual's or group's academic or work performance; or of creating a hostile academic or work environment.

Notification:

Notification takes place two days after the date of posting of any document in the United States mail, properly addressed, or upon the date of receipt of any document, when placed in the campus mail, properly addressed. Written communications to a complainant are properly addressed when sent to the address given in the complaint or the last address given since the filing of the complaint. Notification may also take place on the date any document is sent by electronic mail and/or facsimile, when properly addressed.

Respondent:

Respondent means the person designated to respond to a complaint. Generally the respondent would be the person alleged to be responsible for the prohibited discrimination or harassment alleged in a complaint. The term "Respondent" may be used to designate persons with direct responsibility for a particular action or those persons with administrative responsibility for procedures and policies in those areas covered in a complaint.

Verbal conduct:

Is defined as oral, written, or symbolic expressions that:

- personally describe or is personally directed at a specific individual or group of identifiable individuals; and
- is not necessary to an argument for or against the substance of any political, religious, philosophical, ideological, or academic idea.

Constitutionally protected expression cannot be considered harassment under this policy. [3]

V. Website (for policy)

<https://policies.utexas.edu/policies/hop/3-3020>

VI. Contacts

CONTACT	DETAILS	WEB
Office for Inclusion and Equity	Phone: 512-471-1849	Website: http://equity.utexas.edu (http://equity.utexas.edu) Email: oie@austin.utexas.edu (mailto:oie@austin.utexas.edu)
Office of the Dean of Students	Phone: 512-471-5017	Website: http://deanofstudents.utexas.edu (http://deanofstudents.utexas.edu) Email: deanofstudents@austin.utexas.edu (mailto:deanofstudents@austin.utexas.edu)

VII. Responsibilities & Procedures

General Procedures

1. Reporting

A person who believes that he or she has been subjected to discrimination or harassment in violation of this policy should report the incident to any University official, administrator, supervisor or any other employee who has the authority to take action to redress an alleged violation and/or has the duty of reporting such allegations as defined under "responsible employee" in HOP 3-3031 (<https://policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct>). Students are encouraged to report such incidents to the Office of the Dean of Students; employees and campus visitors are encouraged to report to the Office for Inclusion and Equity ("OIE"). Incidents should be reported as soon as possible after the time of their occurrence. No person is required to report discrimination or harassment to the alleged offender.

2. Reporting Responsibility

Every supervisor, administrator, University official or any other employee who has the authority to take action to redress an alleged violation and/or has the duty of reporting such allegations as defined under "responsible employee" in HOP 3-3031 (<https://policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct>) is responsible for promptly reporting incidents of discrimination and harassment in violation of this policy that come to their attention to either the Office of the Dean of Students or OIE.

3. Responsibility to Cooperate

Faculty, staff, and students must cooperate with University investigations concerning allegations of discrimination or harassment. Refusal to cooperate with an investigation may result in disciplinary action.

Informal Resolution Procedure

1. Informal Resolution

Informal resolution may be an appropriate choice when the conduct involved is not of a serious or repetitive nature and disciplinary action is not required to remedy the situation. No formal investigation is involved in the informal resolution process and no finding is made.

A request for informal resolution should be made within 180 calendar days of the date of the alleged incident to either the Office of the Dean of Students or OIE, who will determine whether the nature of the problem is such that it can be resolved by agreement on an informal basis, and if so, which office will do so.

Methods for informal resolution may include, but are not limited to: coaching the person on how to directly address a situation which is causing a problem; mediating the dispute with the parties; aiding in the modification of a situation in which the offensive conduct occurred; assisting a department or division with the resolution of a real or perceived problem; or arranging a documented meeting with the alleged offender that involves a discussion of the requirements of the Nondiscrimination Policy.

The University will document any informal resolution. Such documentation will be retained by the Office of the Dean of Students or OIE as appropriate and will be kept confidential to the extent permitted by law.

Formal Complaint Resolution Procedure

1. Complaint Procedure

1. Complaint. A complaint alleging discrimination or harassment must be submitted to the Office for Inclusion and Equity or the Office of the Dean of Students. The complaint should contain the following information:

- Name and UT Identification Number of the Complainant(s);
- Contact information, including address, telephone, e-mail;
- Name of person(s) directly responsible for alleged violation(s);
- Date(s) and place(s) of alleged violation(s);
- Nature of alleged violation(s) as defined in this policy;
- Detailed description of the specific conduct that is the basis of alleged violation(s);
- Copies of documents pertaining to the alleged violation(s);
- Names of any witnesses to alleged violation(s) and witnesses' contact information;
- Action requested to resolve the situation;
- Complainant's signature and date of filing; and
- Any other relevant information.

While an investigation may begin on the basis of an oral complaint, the complainant is strongly encouraged to file a written complaint. If the complaint is not in writing, the investigator should prepare a statement of what he or she understands the complaint to be and seek to obtain verification of the complaint from the complainant.

2. Time Limit. A signed complaint must be filed within 180 calendar days of the occurrence of the alleged violation in order to ensure prompt and efficient handling and resolution. At the discretion of OIE or the Office of the Dean of Students, the 180 day filing period may be extended for good cause.

3. Acknowledgement. Within five (5) calendar days after receipt of a signed complaint, OIE or the Office of the Dean of Students, as appropriate, will send the complainant a brief acknowledgment of the complaint, stating that the complaint will be evaluated, and advising the complainant(s) that he or she will be contacted within a given time. The acknowledgment letter will include a copy of these complaint procedures.

4. Complaint Evaluation. A formal investigation will be initiated if a complaint is complete, within the scope of this policy and articulates sufficient specific facts, which, if determined to be true, would support a finding that this policy was violated. The University may not proceed with a complaint investigation under a variety of circumstances, for instance:

- a complaint fails to describe in sufficient detail the conduct that is the basis of the complaint;
- the conduct described in the complaint is not covered by this policy;
- the complaint has been withdrawn; or
- an appropriate resolution or remedy has already been achieved, or has been offered and rejected.

In the event that a Formal Complaint has been filed and if it is determined that the University will not proceed with a complaint investigation, OIE or the Office of the Dean of Students, as appropriate, will send a notification letter explaining the reason(s) to the complainant. The notification letter will also include a statement informing the complainant that, within seven (7) calendar days of the notification, he or she may appeal the determination not to proceed with a complaint investigation to the vice president for the Division of Diversity and Community Engagement or the vice president for Student Affairs, as appropriate. The request for appeal must be a signed, written document articulating why the decision to dismiss the complaint was in error.

The appropriate vice president will respond within ten (10) calendar days of receipt of the appeal. If the decision to dismiss is upheld, that decision is final. If the decision to dismiss is overturned, the complaint is sent back to OIE or the Office of the Dean of Students, as appropriate, for investigation in accordance with the procedures outlined below.

Notwithstanding the above, OIE may initiate an investigation at the request of Human Resources representatives, deans, directors, department heads, or vice-presidents, or at OIE's sole discretion when the facts or circumstances warrant such.

5. **Notification of Respondent.** If it is determined that the University will proceed with a complaint investigation, OIE or the Office of the Dean of Students will give the respondent written notification of the complaint investigation. The notification letter will include a statement of the allegations to be investigated. The notification letter will provide the respondent an opportunity to submit a written response to the allegations within seven (7) calendar days, unless unusual circumstances warrant additional time. The notification letter will include a statement advising the respondent that retaliation against the complainant is prohibited and will subject the respondent to appropriate disciplinary action.
6. **Investigation Responsibility.** The Office of the Dean of Students is responsible for conducting formal investigations of complaints against students alleging discrimination and harassment in violation of this policy [4]. OIE is responsible for conducting formal investigations of complaints against non-students alleging discrimination and harassment in violation of this policy. In the event that a respondent is a student and an employee, OIE will make a determination whether the alleged discriminatory act(s) relates to the respondent's employment. OIE will only initiate an investigation and/or informal resolution if OIE determines that the alleged discriminatory act(s) relates to the respondent's employment. If a complaint is directed against an individual who would otherwise play a role in investigating and attempting to resolve the complaint, the function assigned to that person by these procedures will be delegated to another person.
7. **Investigative Process and Findings.** The investigator will interview both the complainant and the respondent(s) and persons who are considered to have pertinent factual information related to the complaint. The investigator will also gather and examine documents relevant to the complaint. Facts will be considered on the basis of what is reasonable to persons of ordinary sensitivity and not on the particular sensitivity or reaction of an individual. Findings will be based on the totality of circumstances surrounding the conduct complained of, including but not limited to: the context of that conduct, its severity, frequency, and whether it was physically threatening, humiliating, or was simply offensive in nature.
8. **Advisor.** During the complaint process, the complainant(s) and the respondent(s) may designate and thereafter be accompanied by an advisor of his or her choosing at meetings and interviews at which he or she is present; however, no advisor may examine witnesses or otherwise actively participate in a meeting or interview. An individual may only have one advisor present at a time.
9. **Submission of Evidence.** During the complaint investigation process, the complainant(s) and the respondent(s) should provide OIE or the Office of the Dean of Students, as appropriate, with all documents and the identity of witnesses with a summary of the information the witness can provide regarding the issues raised in the complaint.
10. **Report of Findings and Recommendation - Complaints Against Non-Students and Student Employees**

- a. The investigator will provide a proposed statement of findings, copies of relevant documents and any physical evidence considered to the appropriate vice president or designee within sixty (60) days of receipt of the respondent's statement, unless unusual circumstances require more time. The appropriate vice president to act on complaints against faculty and staff will be the vice president or designee over for the area where the respondent is employed. The appropriate vice president to act on complaints against contractors and visitors will be the vice president for the Division of Diversity and Community Engagement or designee. If a complaint is directed against a vice president who would otherwise act on a complaint, the function assigned to that vice president will be delegated to another person.
- b. The appropriate vice president or designee will promptly notify the complainant and the respondent that the investigation has been completed and attach a copy of the proposed statement of findings. Student identifiable information, if any, which is confidential by law, will be redacted. Within ten (10) calendar days from the date of notification, the complainant and respondent may each submit, for consideration by the appropriate vice president or designee, such comments and corrections as they may have.
- c. Within fifteen (15) working days of the notification to the complainant and respondent that the investigation has been completed, the appropriate vice president or designee and the investigator should discuss the findings, and review the record, along with any comments and proposed corrections submitted by the complainant and respondent, if necessary. Further, the appropriate vice president or designee will take one of the following actions: a) request further investigation into the complaint; b) dismiss the complaint if the results of the completed investigation are inconclusive or there is insufficient reasonable, credible evidence to support the allegation(s); or c) find that this policy was violated.
- d. If the appropriate vice president or designee determines that this policy was violated, he or she, following consultation with the investigator or other knowledgeable persons as appropriate, shall determine a disciplinary action that is appropriate for the severity of the conduct, and take whatever other action is necessary to end the discrimination or harassment. Disciplinary actions can include, but are not limited to, written reprimands, the imposition of conditions, reassignment, suspension without pay, and termination.
- e. The appropriate vice president or designee will inform the complainant and respondent, and the appropriate unit head in writing of his or her decision, and will attach a copy of the final statement of findings. Copies of the vice president's or designee's letter, the attached statement of findings, and relevant documents will also be sent to the Office of the Dean of Students or OIE as appropriate.

11. Report of Findings and Recommendation - Complaints Against Students:

- a. The investigator will provide a proposed statement of findings, copies of relevant documents and any physical evidence considered to the Dean of Students, or his or her designee, within thirty (30) working days of receipt of the respondent's statement, unless unusual circumstances require more time.

The Dean of Students or designee and the investigator will meet within fifteen (15) working days to discuss the findings, and review the record.

- b. Within fifteen (15) working days from that meeting, the Dean of Students or designee shall take one of the following actions: a) request further investigation into the complaint; b) dismiss

the complaint if the results of the completed investigation are inconclusive or there is insufficient reasonable, credible evidence to support the allegation(s); or c) find that this policy was violated.

- c. If the Dean of Students or designee determines that this policy was violated, the dean, following consultation with the investigator or other knowledgeable persons as appropriate, will determine whether to initiate a disciplinary action appropriate to the severity of the conduct pursuant to the *General Information Catalog*, Appendix C, Chapter 11 - Institutional Rules on Student Services and Activities. Disciplinary actions can include, but are not limited to, a documented warning, the imposition of conditions, probation, suspension, and dismissal.
- d. As required by federal law, any disclosure of the findings and decision of the Office of the Dean of Students will be governed by the provisions of the Family Educational Rights and Privacy Act.

Miscellaneous

1. Grievance of a Disciplinary Action

- 1. Any employee disciplined pursuant to this policy, except faculty, teaching assistants, assistant instructors or members of the University of Texas Police Department (each of whom are subject to separate procedures[2]), may grieve that action by submitting a written grievance, within ten (10) working days of the imposition of the disciplinary action, to the President's Office. Ordinarily, the president will assign responsibility for review and action on the appeal of the vice president's action to another vice president; however, when required by unusual circumstances, the president may review and handle a grievance pursuant to this policy.
- 2. If the disciplinary action that is being grieved does not involve termination, demotion, or suspension without pay, the vice president will thoroughly review and finally decide the matter within thirty (30) calendar days of its receipt unless unusual circumstances require more time.
- 3. If the disciplinary action that is being grieved involves the termination, demotion or suspension without pay of an employee who is covered by the Handbook of Operating Procedures, [HOP 5-2420 \(\)](#) the vice president who is assigned to review the grievance will follow the procedures for appealing such actions contained in that section. Complainants will be required to appear and testify at hearings that may be a part of such proceedings.
- 4. Any student disciplined under this policy has the right to appeal as provided in *General Information Catalog*, Appendix C, Chapter 11- Institutional Rules on Student Services and Activities.

2. Retaliation Prohibited

A student, faculty, or staff member who retaliates in any way against an individual who has brought a complaint pursuant to this policy or participated in good faith in an investigation of such a complaint is subject to disciplinary action, up to and including dismissal from the University.

3. Filing of False Complaints

Any person who knowingly and intentionally files a false complaint under this policy is subject to disciplinary action up to and including dismissal from the University.

4. Effect on Pending Personnel Actions

The filing of a discrimination or retaliation complaint will not stop or delay any evaluation or disciplinary action related to the complainant who is not performing up to acceptable standards or who has violated University rules or policies.

5. Relationship of Complaint Process to Outside Agency Time Limits

The filing of a discrimination or harassment complaint under this policy does not excuse the complainant from meeting the time limits of outside agencies.

6. Relationship to Grievance Procedure

This complaint procedure will also constitute the grievance procedure for complaints alleging unlawful discrimination. As used herein, "complaint" is synonymous with "grievance."

7. Time Frames

Time frames mentioned in these procedures may be extended for good cause, such as holidays or when classes are not in session, or when it is necessary to complete an investigation due to difficulties reaching witnesses or parties to the complaint.

8. Documentation and Confidentiality

The University will maintain documents related to complaints under this policy as required by law. The Office of the Dean of Students will be responsible for records related to complaints against students. The Office for Inclusion and Equity will be responsible for records related to complaints against non-students. The confidentiality of a complaint under this policy and all documents, correspondence, interviews and discussions relating to the investigation of the information contained in a complaint will be maintained on a need to know basis to the extent permitted by law. Any person who knowingly and intentionally makes an unauthorized disclosure of confidential information contained in a complaint or otherwise relating to the investigation of a complaint under this policy is subject to disciplinary action.

For Assistance: Questions regarding this policy should be directed to the Office of the Dean of Students or the Office for Inclusion and Equity.

Sources: Titles VI and VII of the Civil Rights Act of 1964, as amended; Age Discrimination in Employment Act of 1967, as amended; Age Discrimination Act of 1975; Americans with Disabilities Act of 1990; Equal Pay Act of 1963; Title II of the Genetic Information Nondiscrimination Act of 2008; Veterans Readjustment Act of 1974; Executive Order of 11246; Sections 503 and 504 of the Rehabilitation Act of 1973; Title IX of the Education Amendments of 1972; Texas Labor Code, Chapter 21; BOR 2.I.6; Previous policies: HOP 7.01 and 7.16

[1] Pregnancy Discrimination. Pregnancy discrimination involves treating a woman unfavorably because of pregnancy, childbirth, or a medical condition related to pregnancy or childbirth.

[2] Complaints of full-time faculty, including professional librarians with academic titles, who are notified that they will not be reappointed, or that the subsequent academic year will be their terminal appointment, and who contend that such decisions were made for unlawfully discriminatory reasons will be referred to the Office of the Executive Vice President and Provost for handling pursuant to Rule 31008 of the Rules and Regulations of the Board of Regents of The University of Texas System. Complaints of members of the University of Texas Police Department are subject to procedures set forth in <https://police.utexas.edu/manual/b4.html>.

[3] See Section 13-204 of the Institutional Rules on Student Services and Activities (Appendix C to the *General Information Catalog*) for further information concerning harassment; and Sec. 11-701(b) for information concerning enhanced student penalties for offenses motivated by race, color, or national origin.

[4] The president or designee who is specifically designated by the president for this purpose may authorize an independent investigation into matters that fall under this policy. In these instances, the investigators may be asked to perform any task related to an investigation under this policy and, if so directed, may report directly to the president and/or the designee.

VIII. Forms & Tools

Behavior Concerns Advice Line (BCAL)

[\(512\) 232-5050](tel:(512)232-5050) ([\(tel:\(512\) 232-5050\)](tel:(512)232-5050))

Allows members of the University community to discuss their concerns about an individual's behavior (available 24-hours a day)

<https://www.utexas.edu/safety/bcal/> (<https://www.utexas.edu/safety/bcal/>).

Campus Climate Response Team

<http://diversity.utexas.edu/ccrt/reporting/> (<http://diversity.utexas.edu/ccrt/reporting/>).

Counseling and Mental Health Center

[\(512\) 471-3515](tel:(512)471-3515) ([\(tel:\(512\) 471-3515\)](tel:(512)471-3515))

24-hour telephone counseling service at (512) 471-CALL (2255)

<http://cmhc.utexas.edu> (<http://cmhc.utexas.edu>).

Deputy Title IX Coordinator for Faculty/Staff

Office for Inclusion and Equity

[\(512\) 471-1849](tel:(512)471-1849) ([\(tel:\(512\) 471-1849\)](tel:(512)471-1849))

<http://titleix.utexas.edu/> (<http://titleix.utexas.edu/>).

Deputy Title IX Coordinator for Students

Associate Vice President for Student Affairs and Senior Associate Dean of Students

[\(512\) 471-5017](tel:(512)471-5017) ([\(tel:\(512\) 471-5017\)](tel:(512)471-5017))

titleix.utexas.edu/ (<http://titleix.utexas.edu/>).

Human Resources

[\(512\) 471-4772](tel:(512)471-4772) ([\(tel:\(512\) 471-4772\)](tel:(512)471-4772))

hrsc@austin.utexas.edu (<mailto:hrsc@austin.utexas.edu>)

<http://hr.utexas.edu> (<http://hr.utexas.edu>).

University Ombuds

For students and staff: [\(512\) 471-3825](tel:(512)471-3825) ([\(tel:\(512\) 471-3825\)](tel:(512)471-3825))

For Faculty: [\(512\) 471-5866](tel:(512)471-5866) ([\(http://tel:\(512\) 471-5866\)](tel:(512)471-5866)).

<https://ombuds.utexas.edu/staff> (<https://ombuds.utexas.edu/staff>)

Provides a neutral, informal, and independent space for information about University resources and processes for students, staff and faculty

Office for Inclusion and Equity

[\(512\) 471-1849](tel:(512)471-1849) ([tel:\(512\) 471-1849](tel:(512)471-1849))

equity@utexas.edu (<mailto:equity@utexas.edu>)

<http://equity.utexas.edu> (<http://equity.utexas.edu>)

Student Emergency Services in the Office of the Dean of Students

[\(512\) 471-5017](tel:(512)471-5017) ([tel:\(512\) 471-5017](tel:(512)471-5017))

Provides referrals within the University and in the Austin area when necessary

deanofstudents.utexas.edu/emergency (<http://deanofstudents.utexas.edu/emergency>).

University Compliance Services

English: [1-877-507-7321](tel:1-877-507-7321) (<tel:1-877-507-7321>). Español [1-800-216-1288](tel:1-800-216-1288) (<tel:1-800-216-1288>)

compliance@austin.utexas.edu (<mailto:compliance@austin.utexas.edu>)

utexas.edu/hotline (<http://utexas.edu/hotline>).

University Health Services

Appointments: [\(512\) 471- 4955](tel:(512)471-4955) ([tel:\(512\) 471- 4955](tel:(512)471-4955))

24-hour Nurse Advice Line: [\(512\) 475-6877](tel:(512)475-6877) ([tel:\(512\) 475-6877](tel:(512)475-6877))

Health Promotion Resource Center: [\(512\) 475-8252](tel:(512)475-8252) ([tel:\(512\) 475-8252](tel:(512)475-8252))

<http://healthyhorns.utexas.edu> (<http://healthyhorns.utexas.edu>)

University of Texas Police Department

Emergencies: 911

Non-emergencies: [\(512\) 471-4441](tel:(512)471-4441) ([tel:\(512\) 471-4441](tel:(512)471-4441)), enter "9"

<http://www.utexas.edu/police/> (<http://police.utexas.edu>)

University Title IX Coordinator

University Compliance Services

[\(512\) 232-3992](tel:(512)232-3992) ([tel:\(512\) 232-3992](tel:(512)232-3992))

titleix@austin.utexas.edu (<mailto:titleix@austin.utexas.edu>)

<http://titleix.utexas.edu/> (<https://titleix.utexas.edu/>)

IX. Frequently Asked Questions

None

X. Related Information

Students:

Institutional Rules on Student Services and Activities, [Appendix C, Chapter 11](#)

(<http://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/>). (Student Discipline and Conduct)

Institutional Rules on Student Services and Activities, [Appendix C, Chapter 13](#)

(<http://catalog.utexas.edu/general-information/appendices/appendix-c/speech-expression-and-assembly/>). (Speech, Expression, and Assembly)

Institutional Rules on Student Services and Activities, [Appendix D](#) (<http://catalog.utexas.edu/general-information/appendices/appendix-d/>), (Policy on Sex Discrimination, Sexual Harassment, Sexual Assault, Sexual Misconduct, Interpersonal Violence and Stalking)

Institutional Rules on Student Services and Activities, [Appendix I](http://catalog.utexas.edu/general-information/appendices/appendix-i/)(<http://catalog.utexas.edu/general-information/appendices/appendix-i/>), (Nondiscrimination Policy)

Prohibition of Campus Violence, [HOP 8-1010](http://www.policies.utexas.edu/policies/prohibition-campus-violence)(<http://www.policies.utexas.edu/policies/prohibition-campus-violence>)

University Faculty and Staff:

Prohibition of Sexual Discrimination, Sexual Harassment, Sexual Assault, Sexual Misconduct, Interpersonal Violence, and Stalking ([HOP 3-3031](http://www.policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct)(<http://www.policies.utexas.edu/policies/prohibition-sexual-discrimination-sexual-harassment-sexual-assault-sexual-misconduct>))

Policies and Procedures for Discipline and Dismissal of Employees ([HOP 5-2420](http://www.policies.utexas.edu/policies/policies-and-procedures-discipline-and-dismissal-employees)

(<http://www.policies.utexas.edu/policies/policies-and-procedures-discipline-and-dismissal-employees>))

Hate and Bias Incidents Policy ([HOP 9-1810](https://policies.utexas.edu/policies/hate-and-bias-incidents)(<https://policies.utexas.edu/policies/hate-and-bias-incidents>))

XI. History

Last reviewed & revised: August 28, 2018

Previous review date: April 30, 2008

Editorial revisions made October 29, 2015

Exhibit
John Dalton

61

06/9/2021 JL

Handbook of Operating Procedures 3-3031

Prohibition of Sexual Assault, Interpersonal Violence, Stalking, Sexual Harassment, and Sex Discrimination

Effective July 01, 2015

Executive Sponsor: Chief Compliance Officer and Vice President for Diversity and Community Engagement

Policy Owner: University Title IX Coordinator & Office for Inclusion and Equity

For Immediate Reporting:

Title IX Office:
512-471-0419

Title IX Coordinator:
512-232-3992

titleix@austin.utexas.edu
(mailto:titleix@austin.utexas.edu)

Online reporting:
<https://titleix.utexas.edu/file-a-report>
(<https://titleix.utexas.edu/file-a-report>)

Anonymous Compliance Hotline:
1-877-507-7321

Behavior Concerns Advice Line:
512-232-5050

<https://safety.utexas.edu/behavior-concerns-advice-line>
(<https://safety.utexas.edu/behavior-concerns-advice-line>)

I. Policy Statement

The University of Texas at Austin is committed to providing an educational and working environment for its students, faculty, and staff that is free from sexual assault, interpersonal violence (including domestic and dating violence), stalking, and sexual harassment (including harassment on the basis of sexual orientation, gender identity, gender expression, or pregnancy status). Throughout this Policy, these unacceptable behaviors are collectively referred to as “Prohibited Conduct.”

In addition, this Policy also prohibits sex discrimination and sexual exploitation. It prohibits unprofessional or inappropriate university-related conduct of faculty, staff, other university employees, or other university affiliates that does not rise to the level of Prohibited Conduct. It also prohibits retaliation against someone because the individual reports under this Policy, opposes an unlawful practice, participates in an investigation, or requests supportive measures. Finally, it prohibits other behavior including providing false information or a making a false complaint, interfering with this Policy’s grievance processes, and failing to report Prohibited Conduct as a non-confidential employee. Freedom of speech is central to the mission of institutions of higher education. Constitutionally protected expression cannot be considered a violation under this Policy.

The University is committed to (1) eliminating, preventing, and addressing the effects of Prohibited Conduct and other conduct defined in this Policy; (2) fostering an environment where all individuals are well informed and supported in reporting Policy violations; (3) providing a fair, equitable, and impartial process

for all parties; and (4) establishing the standards by which violations of this Policy will be evaluated and disciplinary action may be imposed.

The University's Title IX Office is the resource for all information regarding the resources, supports, reports, and processes described in this Policy. Title IX maintains a complete electronic pamphlet where all of this Policy's details and references are included. **The Title IX Coordinator, Deputy Title IX Coordinators and staff** (<https://titleix.utexas.edu/our-team>) are available to assist community members in navigating, referring, and participating in any aspect of this Policy.

II. Who This Policy Applies To

This Policy applies to all University faculty, staff, employees, students, visitors, contractors, university affiliates, and applicants for admission to or employment with the University and others conducting business on campus.

III. Where this Policy Applies

This Policy applies to conduct that occurs on campus, in university-owned housing, or in an education program or activity. Campus means any building or property owned or leased by the University that is used in direct support of the University's educational purposes. An education program or activity means locations, events, or circumstances over which the University exercises substantial control, and includes any building owned or controlled by a registered student organization. This Policy applies to off-campus conduct when the conduct substantially affects a person's education or employment with the University or poses a risk of harm to members of the University community. As required by federal law, the conduct and location of the underlying events will determine the appropriate grievance process track which will apply to a given complaint.

IV. Resources and Supportive Measures

A. Immediate Assistance.

(1) Healthcare. Those who experience sexual violence, sexual assault, dating or domestic violence, are encouraged to seek immediate medical care for physical and emotional injuries and trauma from these events.

Also, preserving DNA evidence can be key to identifying the perpetrator in a sexual violence case. Survivors can undergo a medical exam to preserve physical evidence with or without police involvement. If possible, this should be done immediately. If an immediate medical exam is not possible, individuals who have experienced a sexual assault may have a Sexual Assault Forensic Exam (SAFE) performed by a Sexual Assault Nurse Examiner (SANE) within 4 days of the incident. With the examinee's consent, the physical evidence collected during this medical exam can be used in a criminal investigation; however, a person may undergo a SAFE even without contacting, or intending to contact, the police. To undergo a SAFE, go directly to the emergency department of the nearest hospital or facility that provides SAFE services or the University providers of these exams. A list of university resources and local hospitals and facilities is here on the Title IX website. Survivors that are not in the Austin area are encouraged to contact the Title IX Office here for assistance in finding healthcare options in their area.

For more information about the SAFE, see

https://www.texasattorneygeneral.gov/files/cvs/sexual_assault_examination.pdf. The cost of the forensic portion of the exam is covered by the law enforcement agency that is investigating the assault or, in cases where a report will not be made to the police, the Texas Department of Public Safety. This does not include fees related to medical treatment that are not a part of the SAFE.

(2). Police Assistance. The University encourages those who experienced or witnessed sexual violence or stalking, to make a report to the police. The police may, in turn, share the report with the Title IX Office.

If the incident occurred on the University campus, you may file a report with The [University of Texas at Austin Police Department](#) (<https://police.utexas.edu/contact>), even if time has passed since the incident occurred. If the incident occurred in the City of Austin, but off campus, a report may be filed with the [Austin Police Department](#) (<https://www.austintexas.gov/department/apd-sex-crimes-unit>), even if time has passed since the incident occurred. If a report is made to the police, a uniformed police officer will usually be dispatched to the location to take a written report. For incidents occurring outside of Austin, the university encourages contacting the local law enforcement authority.

The University recognizes the right of a victim of a crime to choose whether to report the crime to law enforcement, to be assisted by the University in reporting the crime to law enforcement, or to decline to report the crime to law enforcement. You may contact the [Title IX Office](#) (<https://titleix.utexas.edu/>) to request assistance in making a police report.

(3). Counseling and Other Services. Those who experience sexual violence or stalking, are strongly encouraged to seek counseling or medical and psychological care even if the victim does not plan to request a SAFE or report the incident to the police. Health care providers may prescribe medications to prevent sexually transmitted infections and/or pregnancy even if the police are not contacted or if a SAFE is not performed. Similarly, other individuals impacted or affected by an incident are encouraged to seek counseling or psychological care. Students seeking counseling can get more information from the [Counseling and Mental Health Center](#) (<https://cmhc.utexas.edu/>) (CMHC). Faculty and staff seeking counseling can get more information from the HealthPoint [Employee Assistance Program](#) (<https://eap.utexas.edu/>) (EAP).

B. University Confidential Resources.

The University believes it is critical to provide community members who may be experiencing Prohibited Conduct with access to trained and caring personnel who can provide confidential support, as well as information about available institutional resources, to empower those individuals to make informed decisions about their rights and options. A list of these “Confidential Employees” can be found in the University’s [Title IX Office website](#) (<https://titleix.utexas.edu/campus-resources>).

State law requires university employees, including faculty, to file a report with the Title IX Coordinator when they receive information regarding an incident that the faculty or employee reasonably believes constitutes sexual assault, dating violence, stalking, or sexual harassment. However, members of the University community may speak to Confidential Employees about Prohibited Conduct without the conversation triggering a mandatory report of incident details. **A Confidential Employee is not required to report any information that would violate an individual's expectation of privacy, such as the name or other identifying information of an individual who has experienced or allegedly engaged in Prohibited Conduct.**

C. Other Resources.

The University’s Title IX Office maintains an updated and complete list of the different University and community resources on its [website](#) (<https://titleix.utexas.edu/campus-resources>). Community members are encouraged to reach out to the Title IX Office for assistance in identifying the resources that best fit their needs and for any necessary guidance in navigating the options.

D. Supportive Measures.

The University will offer reasonably available individualized services, without any fee or charge, to the parties involved in a reported incident with or without the filing of a Formal Complaint, when applicable. Supportive Measures may include but are not limited to housing reassignment, counseling, extensions of deadlines or other course-related adjustments, modifications of work or class schedules, withdrawal from or retake of a class without penalty, campus safe-walk services, mutual restrictions on contact between the parties, change in work or housing locations, leaves of absence, increased security and monitoring of certain areas of campus, or other similar measures tailored to the individualized needs of the parties. Affected parties are encouraged to contact the **Title IX Office** (<https://titleix.utexas.edu/campus-resources>) to begin the process for identifying and coordinating support measures that may be available. The University will maintain the confidentiality of Supportive Measures provided to the Parties, to the extent that maintaining such confidentiality does not impair the ability of the University to provide the Supportive Measures.

V. Prohibited Conduct Definitions.

The following are categories of conduct that are prohibited by the University and will result in disciplinary action. For employees, the presumptively appropriate discipline for a finding of responsibility of these categories of conduct is termination.

A. Sexual Assault: Conduct that meets the definition of Rape, Fondling, Incest, or Statutory Rape.

(1) Rape: The penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the Consent of the affected individual.

(2) Fondling: The intentional touching of private body parts (including the genitalia, anus, groin, breast, inner thigh, or buttocks) of another person for the purpose of sexual gratification without the Consent of an affected individual.

(3) Incest: Sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law.

(4) Statutory Rape: Sexual intercourse with a person who is younger than 17 years of age and is not a spouse of the Respondent.

B. Interpersonal Violence: Violence committed in a relationship that meets the definition of Domestic Violence or Dating Violence.

(1) Domestic Violence: Physical abuse, violence, or threats of abuse or violence committed by a (a) current or former spouse or intimate partner of the affected individual, (b) a person with whom the affected individual shares a child in common, (c) a person with whom the affected individual is cohabiting (or has cohabited) with, (d) a person similarly situated to a spouse of the affected individual under the domestic or family violence laws of the State of Texas, or (e) any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the State of Texas.

(2) Dating Violence: Physical abuse, violence, or threats of abuse or violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the affected individual. The existence of such a relationship will be determined based on (a) the type and length of the relationship and (b) the frequency of interaction between the persons involved in the relationship.

C. **Stalking:** A course of conduct directed at a specific person that would cause a reasonable person to fear for the person's safety or the safety of others or would cause that person to suffer substantial emotional distress.

(1) A "course of conduct" means two or more acts in which a person directly, indirectly or through third parties, by any action, method, device or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person or interferes with a person's property.

(2) "Reasonable person" means a reasonable person under similar circumstances and with similar identities to the affected individual.

(3) "Substantial emotional distress" means significant mental suffering or anguish that may, but does not necessarily, require medical or other professional treatment or counseling.

D. **Sexual Harassment** is unwelcome, sex-based verbal or physical conduct that qualifies as quid pro quo harassment or hostile environment harassment.

(1) Types of Sexual Harassment.

(a) **Quid pro quo:** An employee of the institution conditioning the provision of University aid, benefit, service or term of employment or educational experience on an individual's participation in unwelcome sexual conduct; or

(b) **Hostile environment:** A hostile environment exists when the conduct is unwelcome and so sufficiently severe, pervasive, and offensive that it effectively denies a person equal access to an education program or activity. Equal access is denied when the conduct unreasonably interferes with, limits, or deprives an individual from participating in or benefiting from the University's education or employment programs and/or activities. The University assesses the totality of the circumstances to determine if these factors are present. Severity determinations consider whether conduct is physically threatening or humiliating, or a mere offensive utterance. Pervasive means frequent. Offensive means conduct that a reasonable person would find hostile or abusive, and the affected individual did perceive it to be hostile or abusive. Conduct must be deemed severe, pervasive, and offensive from both a subjective and an objective perspective. It will be necessary, but not adequate, that the conduct was unwelcome to the individual who was affected.

This type of harassment includes "gender-based harassment," which is harassment based on an individual's actual or perceived gender, sexual orientation, gender identity or gender expression, or is related to an individual exhibiting what is perceived as a stereotypical characteristic for one's sex, or for failing to conform to stereotypical notions of masculinity and femininity, regardless of the actual or perceived sex, gender, sexual orientation, gender identity, or gender expression of the individual. Gender-based harassment may include acts of aggression, intimidation, or hostility, whether verbal, non-verbal, graphic, physical, or otherwise, even if the acts do not involve conduct of a sexual nature, when the conditions outlined above, are present.

(2) **Totality of Circumstances.** The determination of whether an environment is "severe, pervasive, and offensive" is based on a totality of circumstances, including, but not limited to:

- the degree to which the conduct interfered with the affected individual's educational or work performance;
- the type, frequency, and duration of the conduct;

- whether the alleged harasser singled out the affected individual;
- whether the alleged harasser knew the complained-of conduct was unwelcome;
- whether the conduct was physically threatening;
- whether the conduct was humiliating;
- the effect of the conduct on the individual's mental or emotional state; and
- whether the speech or conduct deserves the protections of academic freedom or the First Amendment.

(3) Free Speech. Oral and written communication may rise to the level of sexual harassment, but must be measured against an individual's free speech rights. The freedoms of speech, expression, and assembly are fundamental rights of all persons and are central to the mission of the University. A person may be disciplined for speech that constitutes sexual harassment, but may not be disciplined for engaging in protected speech.

VI. Consent.

A. Consent is the act of willingly agreeing to engage in each specific sexual contact or activity. Consent must be clear, knowing, voluntary, and expressed prior to engaging in and during each sexual act. Consent may be expressed by mutually understandable words or actions. Given the importance of sexual autonomy and the potential impact on those subjected to nonconsensual sexual contact or activity, the University charges all parties to a sexual contact or activity with obtaining agreement from each party engaging in the sexual contact or activity. In assessing discipline matters, the responsibility for obtaining effective Consent is on the person initiating each particular sexual activity or contact.

B. Consent to some form of sexual contact or activity cannot be automatically taken as agreement to any other form of sexual contact or activity. Previous Consent does not imply on-going Consent to future sexual conduct. Silence or passivity—without actions demonstrating agreement—cannot be assumed to show Consent. Consent, once given, can be withdrawn at any time. Consent to engage in sexual activity with one person does not imply consent to engage in sexual activity with another. An individual's manner of dress does not constitute Consent to engage in sexual contact or activity. The existence of a current or previous dating or sexual relationship between two or more individuals does not, in and of itself, constitute Consent to engage in sexual contact or activity.

C. Consent is not effective if it results from:

(1) Force. Force is the use or threat of physical harm to overcome freedom of will to choose whether to participate in sexual activity.

(2) Coercion. Coercion is conduct, including intimidation and express or implied threats of emotional, educational, reputational, financial, or other harm that would place a reasonable person in fear of immediate or future harm to themselves or another and that is employed to persuade or compel someone to engage in unwelcome sexual contact.

(3) Incapacitation. Incapacitation is a mental state caused by drunkenness, intoxication, or other mental or physiological condition in which a person does not have the ability to indicate agreement to engage in sexual contact or activity because the person is mentally and/or physically helpless due to a mental or physiological impairment, drug or alcohol consumption, either voluntarily or involuntarily, or the individual is unconscious, asleep, or otherwise unaware that the sexual contact or activity is occurring.

a. An individual's use of alcohol or drugs does not diminish that individual's responsibility to obtain Consent if that individual is the one who initiates the complained-of sexual contact or

activity.

b. In determining Consent where alcohol or other drugs are involved, the University considers the totality of the circumstances, including (but not limited to):

- whether a sober reasonable person would have known or deduced that the other was incapacitated;
- whether a person actually knew the other was incapacitated.
- whether a person demonstrates that they are unaware of where they are, how they got there, or why or how they became engaged in a sexual interaction;
- whether a person was conscious or unconscious;
- whether and when a person became sick due to intoxication;
- a person's ability to communicate and/or slurred speech;
- a person's coordination and physical control of the person's own body (ex. ability to walk, dress/undress, perform simple tasks); and
- any other action that would be indicative of a level of cognitive and physical functioning.

c. In most circumstances, a minor person under the age of 17 does not have capacity to consent to sexual activity under Texas law.

d. Incapacitation may also exist because of a mental, physiological or developmental disability that impairs the ability to Consent.

VII. Additional Conduct Violations Under This Policy.

The following are additional categories of conduct that are prohibited by the University and will result in disciplinary action.

A. Sex Discrimination: Disparate treatment of an individual on the basis of sex or gender (including, but not limited to, sexual orientation, gender identity, gender expression, and pregnancy status) that adversely affects the terms or conditions of the individual's employment or substantially interferes with the individual's access to education or educational benefits.

B. Sexual Exploitation: Sexual Exploitation occurs when a person takes non-consensual sexual advantage of another person for the person's own benefit, or to benefit anyone other than the affected individual, and that behavior does not otherwise constitute other Prohibited Conduct.

Examples of Sexual Exploitation include, but are not limited to:

- causing or attempting to cause the Incapacitation of another individual for sexual purposes;
- electronically recording, videoing, photographing, or transmitting sexual sounds or images of another individual without their Consent;
- allowing a third-party to observe sexual acts without all parties' Consent;
- engaging in voyeurism (e.g., watching private sexual activity without the Consent of the participants or viewing another person's intimate parts (including genitalia, breasts, or buttocks) in a place where that person would have a reasonable expectation of privacy); or
- knowingly exposing another individual to a sexually transmitted disease or infection, including, but not limited to, human immunodeficiency viruses (HIV).

C. Unprofessional or Inappropriate Conduct.

The University, consistent with its commitment to seek to eliminate and prevent Prohibited Conduct, further prohibits faculty, staff, other University employees, and University affiliates from engaging in conduct of a sexual nature that is unprofessional or inappropriate for the educational or working environment, but does not rise to the level of another form of Prohibited Conduct outlined above in this Policy.

Behavior that could constitute unprofessional or inappropriate conduct of a sexual nature may include, but is not limited to:

- repeatedly engaging in sexually oriented conversations, comments, horseplay, or jokes including the use of language or the telling of jokes or anecdotes of a sexual nature, commenting on an individual's body parts or the fit of their clothing, sharing or asking about an individual's sexual activities or preferences;
- making targeted and repeated unwelcome overtures to an individual when the overtures could be reasonably construed as romantic or sexual in nature; and
- engaging in a course of conduct that fails to observe the appropriate boundaries of the supervisor/subordinate or faculty member/student relationship;

Whether or not the unprofessional or inappropriate conduct is sexual in nature will be determined by examining the totality of the circumstances, whether a reasonable person subject to the conduct would construe the conduct as sexual in nature, and whether the individual subject to the conduct construed it as sexual in nature.

This provision applies when the unprofessional or inappropriate conduct occurs on campus, in university-owned housing, or in an education program or activity. This provision also applies to off-campus conduct, including online conduct, when the conduct substantially affects a person's education or employment with the University or poses a risk of harm to members of the University community. Other forms of unauthorized conduct of a sexual nature which are not covered by this Policy, are prohibited in HOP 3-3050 on Consensual Relationships. Other forms of unprofessional conduct not of a sexual nature are prohibited in HOP 5-2420.

D. Retaliation.

Faculty, staff, university affiliates, and students are prohibited from engaging in retaliation. Retaliation means any action taken to adversely affect the terms or conditions of an individual's academic experience or employment with the University, or other institutional status of a student, employee, university affiliate, visitor, or applicant for admission to or employment with the University, because an individual has, in good faith, reported or brought a complaint under this Policy, opposed an unlawful practice, participated in an investigation, or requested supportive or protective measures.

An individual who engages in Retaliation under this policy is subject to disciplinary action by the University, up to and including termination or expulsion.

Examples of retaliation include, but are not limited to, denial of an educational opportunity, experience or promotion; non-selection/refusal to hire; denial of job benefits; demotion or negative impact on grades or academic status; suspension; discharge; reprimands; negative evaluations or refusals to provide references; harassment; or other adverse treatment that is likely to deter reasonable people from pursuing their rights.

The filing of a Complaint under this Policy will not stop or delay any action unrelated to the Formal Complaint, including: (1) any evaluation or disciplinary action relating to a person who is not performing up to acceptable standards or who has violated University rules or policies; (2) any evaluation or grading of students participating in a class, or the ability of a student to add/drop a class, change academic programs, or receive financial reimbursement for a class; or (3) any job-related functions of a University employee. Nothing in this section shall limit the University's ability to take interim action or execute an emergency removal.

E. False Information and False Complaints.

Any person, who in bad faith, knowingly files a false complaint or report under this Policy or provides materially false information is subject to separation from the University, as required by State law. A determination that a Respondent is not responsible for allegations of violation of this Policy does not imply a report, Formal Complaint, or information provided was false. Similarly, a determination that a Respondent is responsible for a violation under this Policy does not imply that a Respondent's statements disclaiming responsibility were false.

F. Interference with Grievance Processes under this Policy.

Any person who interferes with the Grievance Processes under this Policy is subject to disciplinary action up to and including dismissal or separation from the University. Interference with a Grievance Process may include, but is not limited to:

- (1) Attempting to coerce, compel, or prevent an individual from providing testimony or relevant information;
- (2) Removing, destroying, withholding, or altering documentation relevant to the Grievance Process; or
- (3) Knowingly providing false or misleading information to the Title IX Coordinator, investigator or hearing officer, or encouraging others to do so.

G. Failure to Report by a Non-Confidential Employee.

All Employees, not designated by the University as Confidential Employees, that knowingly fail to report all known information concerning an incident the employee reasonably believes constitutes stalking, dating violence, sexual assault, or sexual harassment committed by or against a student or employee at the time of the incident, are subject to disciplinary action, including termination. Non-Confidential Employees are required to promptly report known incidents. Promptly means as soon as is practicable and without unreasonable delay.

For purposes of Failure to Report, the definition of sexual harassment, as defined under state law, is broader than the definition of sexual harassment under this Policy and is defined as:

Unwelcome, sex-based verbal or physical conduct that:

- (1) in the employment context, unreasonably interferes with a person's work performance or creates an intimidating, hostile, or offensive work environment; or

(2) in the education context, is sufficiently severe, persistent, or pervasive that the conduct interferes with a student's ability to participate in or benefit from educational programs or activities at a postsecondary institution.

VIII. Sanctions for Policy Violations.

If a person is found responsible for violating this Policy, the University may impose one or more sanctions and initiate additional remedial actions in accordance with the guidelines set forth below.

This Policy prohibits a broad range of conduct. In keeping with the University's commitment to foster an environment that is safe, inclusive, and free from discrimination and harassment, the appropriate disciplinary authority has some discretion in the imposition of sanctions tailored to the facts and circumstances of each report, to the impact of the conduct, and to achieving accountability. The imposition of sanctions is designed to eliminate conduct described in this policy, prevent its recurrence, and remedy its effects, while supporting the University's educational mission. Sanctions may include educational, restorative, rehabilitative, and punitive components. Some conduct, however, is so egregious in nature, harmful to the individuals involved, or so adverse to the educational process that it requires severe sanctions, including suspension, expulsion, or termination.

A. Sanctions for Student-Respondents

Sanctions against a student will be imposed by the Office of the Dean of Students in accordance with the University's student disciplinary procedures. Student disciplinary actions may include, but are not limited to, probation, suspension, or expulsion. For a complete list of authorized disciplinary sanctions for students, see [Subchapter 11–700](https://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/) (<https://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/>) of the University's General Information Catalog.

B. Sanctions for Employee-Respondents

Sanctions against University employees will be handled under the University's employment policies governing discipline and dismissal of faculty and staff, respectively. The Executive Vice President and Provost will determine sanctions for faculty. The Associate Vice President for Human Resources will determine sanctions for staff. Sanctions may include, but are not limited to, mandated training; written reprimands or corrective action; imposition of conditions on teaching, supervising, or other official duties; financial penalty; unpaid time off; suspension with or without pay; demotion; reassignment of duties; other professional sanctions; or termination.

The University will consider termination for faculty or staff, the presumptively appropriate discipline for a finding of responsibility, for the following Prohibited Conduct: (1) Sexual Assault, (2) Interpersonal Violence (3) Stalking, and (4) Sexual Harassment. This presumption may be rebutted or confirmed, in the disciplinary authority's discretion, by one or more mitigating or aggravating factors in order to reach a just and appropriate resolution in each case.

1. **Mitigating factors** include, but are not limited to:

- the expressed requests of the affected individual; and
- the absence of previous disciplinary history of the Respondent.

2. Aggravating factors include, but are not limited to:

- the nature and severity of the conduct, including the use of force or a weapon;
- the level of ongoing threat to the physical safety and security of the Complainant or other members of the University community;
- the need to remedy and address the impact or effects of the conduct on the Complainant;
- the impact or implications of the conduct on the community or the University, including other members of an affected academic or departmental unit;
- whether the Respondent engaged in any acts of retaliation for the report of the incident;
- prior misconduct by the Respondent, including the Respondent's relevant prior discipline or criminal history (if available); and
- refusal to acknowledge culpability or accept responsibility for clear violation of the Policy.

Sanctions will be communicated to the parties, as appropriate, in writing by the Executive Vice President and Provost and/or the Associate Vice President for Human Resources, or their designee. In all cases involving violations of this Policy, the file will be archived by the Title IX Office.

IX. Responsibilities & Procedures

A. Definitions.

(1) Complainant. The individual who is alleged to be the victim of any prohibited conduct under this Policy.

(2) Participants. The term “participants” includes the Complainant, Respondent, and any witnesses.

(3) Parties. The term “parties” refers to the “Complainant” and the “Respondent” under this Policy.

(4) Preponderance of the Evidence. The greater weight of the credible evidence. Preponderance of the evidence is the standard for determining allegations of conduct that violates this Policy. This standard is satisfied if the action is deemed more likely to have occurred than not.

(5) Reporter. The individual making a report of an incident under this Policy

(6) Respondent. The individual and/or organization reported to be the alleged perpetrator of conduct that violates this Policy.

B. Reporting Incidents, Formal Complaints, and Interim Measures.

The University recognizes the rights of Parties to report an incident to the University and to receive a prompt and equitable resolution of the report.

This Policy distinguishes between *reporting* incidents and *filing* a Formal Complaint.

(1) Reporting Incidents. Any person may report an incident under this Policy to the **Title IX Coordinator** (https://utexas-advocate.symplicity.com/titleix_report/index.php/pid9194612), via email at titleix@austin.utexas.edu (<mailto:titleix@austin.utexas.edu>), via mail at PO Box 8118, Austin, TX 78713-8118, or by calling 512-232-3992, regardless of whether the person reporting is the person alleged to be subject to the complained-of behavior. Also, any person may report incidents anonymously via [an online reporting form](https://utexas-advocate.symplicity.com/titleix_report/index.php/pid9194612) (https://utexas-advocate.symplicity.com/titleix_report/index.php/pid9194612).

Reporting an incident informs the University of the incident, which allows the institution to provide Supportive Measures (see Section IV(D) above) to the Parties and does not necessarily result in the

initiation of a grievance process (as outlined below). All Parties who report incidents under this Policy will be offered individualized Supportive Measures. A decision to remain anonymous may greatly limit the University's ability to stop the alleged conduct, collect evidence, or take action against parties accused of violating this Policy. Prompt reporting is encouraged.

Individuals may prefer to report incidents outside of the University. A list of available outside entities that receive reports is available [here](#).

(2) Filing Formal Complaints. Any person subject to an alleged incident under this Policy, may file a Formal Complaint here to initiate the appropriate grievance process. There are three grievance process tracks under this Policy. The Title IX Office maintains a chart here showing the three different tracks and their respective applications, as described below, as explained in more detail below (including exceptions and details as to applicability). The University recognizes the right of a victim of Sexual Harassment, Sexual Assault, Dating Violence, or Stalking to report the incident and to receive a prompt and equitable resolution of the report or Formal Complaint.

The Title IX Coordinator may also file and sign a Formal Complaint based on any incident report received which will initiate the appropriate grievance process track.

(3) Formal Complaint Dismissals.

(a) The University may dismiss a Formal Complaint, at its discretion, for any of the following circumstances:

- (i) If the Complainant requests in writing to dismiss a Formal Complaint;
- (ii) If the Respondent is an employee and no longer employed by the University at the time the Formal Complaint is filed, or is no longer employed at any time during the grievance process including the investigation or hearing;
- (iii) Any specific circumstances that prevent the University from gathering evidence sufficient to reach a determination as to the Formal Complaint or any allegations therein; or
- (iv) The conduct alleged does not meet the definition of any conduct prohibited under this Policy.

(b) If the University dismisses a Formal Complaint, the University must provide both parties a written notice of the dismissal and the reason(s) for the dismissal. Factors the University must consider when determining whether to investigate an alleged incident under this Policy include, but are not limited to:

- (i) The seriousness of the alleged incident;
- (ii) Whether the University has received other reports of Prohibited Conduct by the alleged Respondent;
- (iii) Whether the alleged incident poses a risk of harm to others; and
- (iv) Any other factors the University determines relevant.

Under state law, if the Complainant requests in writing that the University not investigate a report, the University must inform the Complainant of the decision whether or not to investigate. If the University dismisses a Formal Complaint, the University must provide the Complainant and Respondent a written notice of the dismissal and the reason(s) for the dismissal.

(c) If the Respondent is a student, who withdraws or graduates while disciplinary charges are pending for a violation of Sexual Harassment, Sexual Assault, Dating Violence, or Stalking, the

University will not end the disciplinary process or issue a transcript to the student until the University makes a final determination of responsibility. These matters will be expedited as necessary to accommodate both the student and the affected individual's interest in a speedy resolution.

(4) Interim Measures. Appropriate University officials will decide if and what interim measures are necessary. Such interim measures may include, but are not limited to, separating the Complainant's and Respondent's academic or working situations, prohibiting contact between parties involved in a complaint, suspending the right of the Respondent to be present on campus or otherwise altering the University status of the Respondent. Other interim measures may be implemented given the Respondent's relationship with the University. These interim measures may be kept in place through the conclusion of any review, investigation, or appeal process.

Emergency removal of an individual may be necessary. A Respondent may be removed from the University's education program, activity, or work environment on an emergency basis if, after an individualized safety and risk analysis, it is determined that such a removal is justified because the Respondent poses an immediate threat to the physical health or safety of an individual arising from the allegations of conduct prohibited by this Policy. Under these circumstances, the Respondent will be notified in writing of the emergency removal from the University's education program, activity, or work environment and the Respondent will have an opportunity to immediately challenge the decision following the emergency removal.

(5) Employee Investigation Leave and Alternative Work Assignment. An employee Respondent may be placed on investigation leave or alternative work assignment, in accordance with the University's policy and procedures, during the pendency of a Grievance Process, as outlined in this Policy.

C. Standard of Evidence & Presumption of Not Responsible. All Grievance Processes tracks will use the preponderance of the evidence standard, as defined in this Policy. By law, it is presumed that the Respondent is not responsible for the alleged conduct unless that determination regarding responsibility is made at the conclusion of the Grievance Process.

D. Grievance Process Track A.

(1) Application. Grievance Process Track A in this Policy applies in the instances where all of the following conditions are met; in all other instances, allegations of conduct violating this Policy will be handled in accordance with the Grievance Process Tracks in Section IX(E) below:

- (a) the Respondent is a student (including a student employee) or employee or other university affiliate at the University at the time of the alleged conduct;
- (b) the alleged conduct includes Sexual Assault, Dating Violence, Domestic Violence, Stalking, or Sexual Harassment;
- (c) the alleged conduct occurred against a person in the United States; and
- (d) where the Complainant was participating or attempting to participate in an education program or activity at the University. This element is met if the conduct occurred in any of the following: on any University property; during any University activity; in a building owned or controlled by a student organization that is officially recognized by the University; or in instances where the University exercised substantial control over the Respondent and the context in which the alleged conduct occurred.

(2) Written Notice of the Formal Complaint and Notification of University Offices Offering Assistance.

After receiving a Formal Complaint, the Title IX Office will provide a written notice to the Parties of the Formal Complaint and available University resources and assistance. The written notice of the Formal Complaint will include the following:

- A notice of the Grievance Process steps, as outlined in this Policy;
- A notice of the allegations that potentially constitute Prohibited Conduct under this Policy, including sufficient details about the alleged conduct, including the identity of the parties, if known, and the date(s), time(s), and location(s) of alleged conduct known by the University at the time of the Formal Complaint;
- A statement of the potential policy violations being investigated;
- A statement that the Respondent is presumed not responsible for the alleged conduct and that the determination regarding responsibility will be made at the conclusion of the Grievance Process;
- A statement of the range of possible disciplinary sanctions and remedies the University may implement upon a determination of responsibility;
- A statement that credibility determinations will not be based on a person's status as a complainant, respondent, or witness;
- Both parties may have an advisor of their choice, who may be, but is not required to be, an attorney, and may inspect and review all evidence;
- A statement that the parties may review evidence gathered as part of any investigation;
- A statement that knowingly making false statements or knowingly submitting false information during the Grievance Process is prohibited and subject to disciplinary action; and
- Any other information relevant to the written notice.

(3) Investigation of the Formal Complaint—Gathering of Evidence.

(a) Respondent Statement. After the University provides written notice of a Formal Complaint to the parties, the Respondent will be allowed a reasonable time to respond in writing and through an interview with the investigator.

(b) Notice of Events. The University will provide written notice to a Party, whose participation is invited or expected, of the date, time, location, participants, and purpose of all meetings, investigative interviews, or other proceedings in the Grievance Process.

(c) Evidence. The Parties in the investigation may present any information and evidence that may be relevant to the Formal Complaint, and may have an advisor of their choice attend any related interview, meeting, or proceeding in the Grievance Process. Advisors are not permitted to actively participate in meetings or proceedings in the Grievance Process, unless as expressly outlined below in Section IX(D)(4)(j). The Parties may present the names of any fact or expert witnesses who may provide relevant information, and how the witnesses may be relevant to the Formal Complaint. The Parties may submit to the investigator any questions they would like asked of any known potential witnesses or parties.

(d) Witness Interviews. The investigators will interview relevant and available witnesses. Neither the Complainant nor the Respondent will normally attend these interviews; however, if either one is permitted to attend, the other shall have the same right.

(e) Investigation Timeframe. The investigation of a Formal Complaint will be concluded within 90 business days of the filing of a Formal Complaint. The Parties should be provided updates on the progress of the investigation, as needed.

(f) Access to Evidence. Prior to the completion of the investigation report, the investigators will provide access to all evidence obtained (whether relevant or not) as part of the investigation to both Parties (and the Party's advisor, if any, upon a Party's signed information release for their advisor of choice). Both Parties will have 10 business days to inspect, review, and respond to the evidence. All responses to the evidence must be submitted by the Party in writing to the investigator. The investigators will consider all timely responses submitted by the Parties.

(g) Completed Investigation Report. The completed investigation report will outline each of the allegations that potentially constitutes conduct that violates this Policy, provide the timeline (e.g. procedural steps) of the investigation, and objectively summarize relevant evidence, participant statements, and responses to questions. The investigator will provide a completed investigation report concurrently to both Parties and each Party's advisor, if any, upon a Party's signed information release for their advisor of choice at least 10 business days prior to the date of the scheduled hearing to review and provide a written response at the hearing. A copy of the completed investigation report will be issued to the Title IX Coordinator, and to the hearing officer assigned for the hearing.

(4) Live Hearing—Determination of Responsibility.

(a) Live Hearing Requirement. Absent a Formal Complaint dismissal or the Parties' decision to pursue the Restorative Practices Alternative, the University will provide a live hearing for all Formal Complaints subject to this Grievance Process Track A.

(b) Written Notice of the Hearing. The University will provide at least 10 business days written notice to participants of the hearing (and the Party's advisor, if any, upon Party's signed information release for their advisor of choice), including the date, time, location, names of all participants of the hearing (including the hearing officer, and all Parties and participants in the investigation report), purpose of the hearing, a statement of the alleged conduct charges, and a summary statement of the evidence gathered.

(c) Challenges to the Hearing Officer. Either Party may challenge the fairness, impartiality or objectivity of a hearing officer. The challenge must be submitted in writing to the hearing officer through the office coordinating the hearing within 4 business days after notice of the identity of the hearing officer, and must state the reasons for the challenge. The Director of Compliance or its designee will be the sole judge of whether the hearing officer can serve with fairness, impartiality, and objectivity. In the event that the hearing officer recuses themselves, an alternative hearing officer will be assigned in accordance with University Compliance Services' procedures.

(d) Hearing Officer Duties at the Hearing. The hearing officer will rule on all procedural matters and on objections regarding exhibits and testimony of participants at the hearing, may question participants who testify at the hearing, and is entitled to have the advice and assistance of legal counsel from the Office of General Counsel of The University of Texas System.

(e) **Access to Evidence.** Each Party will have access to all of the evidence from the investigation, including a copy of the completed investigation report, as outlined in Section X(D)(3)(g) above.

(f) **Separate Rooms and Virtual Participation.** At the request of either Party, the University will provide the hearing to occur with the Parties located in separate rooms with technology enabling the hearing officer and the Parties to simultaneously see and hear the participants answering questions. Participants may appear at the hearing virtually, and are not required to be physically present in the same physical location of the hearing.

(g) **Opening Statements.** Each party may make opening and closing statements.

(h) **Privileged Information Excluded.** No person will be required to disclose information protected under a legally recognized privilege. The hearing officer must not allow into evidence or permit or rely upon any questions or evidence that may require or seek disclosure of such information, unless the person holding the privilege has waived the privilege. This includes information protected by the attorney-client privilege.

(i) **Advisor of Choice.** Each Party must have an advisor. Each party may have an advisor of their choice at the hearing. If a Party does not have an advisor, the University must provide one. Advisors are not permitted to actively participate in the hearing, except for asking questions of the other Party and any other witnesses. In addition, witnesses may have an advisor of their choice at the hearing.

(j) **Questioning Participants.** The hearing officer may, at the hearing officer's discretion, ask questions during the hearing of any Party or witness and may be the first person to ask questions of any Party or witness. Each Party's advisor will have an opportunity to ask relevant questions and follow-up questions of the other Party and of any witnesses that participate in the hearing, including questions that challenge credibility. Parties will rely on their advisors to ask their questions directly, orally, and in real time at the hearing. The Parties will not be permitted to personally ask questions of the other Party or any witnesses that participate in the hearing.

(i) **Questions Procedure.** Advisors will ask questions under the following procedure:

- The advisor will ask a question of the applicable participant.
- Before the participant answers a question, the hearing officer will rule as to whether the advisor's question is relevant to the alleged conduct charges.
- If the hearing officer rules the advisor's question as not relevant, then the hearing officer must explain any decision to exclude a question as not relevant. If the hearing officer allows the question as relevant, the participant will answer it.

(ii) **Prior Sexual History.** A Complainant's sexual predisposition or prior sexual behavior are not relevant except where questions and evidence about a Complainant's prior sexual behavior are offered to prove that someone other than the Respondent committed the alleged conduct charged by the Complainant or if the questions or evidence concern specific incidents of the Complainant's prior sexual behavior with the Respondent and are offered to prove the Complainant's consent of the alleged conduct.

(iii) **Refusal to Submit to Cross-Examination.** If a party or witness refuses to submit to cross-examination questions during the hearing, the hearing officer will not rely on any statement of that party or witness, when reaching a responsibility determination. The hearing officer will not draw an inference about the determination regarding responsibility based solely on a Party's or witness's absence from the hearing or refusal to answer questions.

(k) **Hearing Officer Determination.** The hearing officer will prepare an initial draft written determination, which must include the following:

- The allegations that potentially constitute a conduct violation of this Policy;
- A description of all of the procedural steps of the Grievance Process under this Policy (from receipt of a Formal Complaint to the Hearing Decision);
- The findings of fact supporting the hearing officer's determination;
- The conclusion(s) and a rationale as to whether the Respondent is responsible for each allegation;
- The remedies, if applicable, designed to restore the Complainant's access to the education program or activity; and
- The institution's procedures and permissible bases for the Parties to appeal, if applicable.

If the hearing officer finds the Respondent responsible for any alleged violations, the initial draft determination will be referred to the appropriate decision makers for decision regarding disciplinary sanctions, as follows:

- If the Respondent is a student, it will be referred to the Dean of Students for discipline decision;
- If the Respondent is faculty, it will be referred to the Executive Vice President and Provost for discipline decision; and
- If the Respondent is staff, it will be referred to the Associate Vice President of Human Resources for discipline decision.

Decision makers will provide the discipline decisions to the hearing officer within 10 business days of the hearing officer's referral to the decision maker. Upon receipt of the discipline decisions from the respective decision makers, the hearing officer will incorporate the discipline sanctions to prepare the completed written report. The completed written report will include all components required in the initial draft written report and the disciplinary sanctions imposed.

The hearing officer will send a copy of the completed written hearing determination concurrently to the Parties, the Title IX Coordinator, and the Dean of Students or Executive Vice President and Provost or Associate Vice President of Human Resources.

(l) **Recordings.** The hearing will be recorded in audio or audiovisual format, or transcribed. The University maintains the discretion to determine which method of recording to employ. The recording or transcript, if applicable, will be available for the parties to inspect and review, upon request.

(5) Appeal of Hearing Determination.

(a) Basis for Appeal. Either Party may appeal in writing a hearing officer's determination regarding a Respondent's responsibility under the Grievance Process or from the University's dismissal of a Formal Complaint (or any allegations in the Formal Complaint) within 10 business days of notification of such a determination, on the following bases:

- A procedural irregularity that affected the outcome of the matter;
- There is new evidence that was not reasonably available at the time of the determination regarding responsibility or dismissal was made that could affect the outcome of the matter;
- A challenge to the hearing officer's application of the standard of proof to the evidence; or
- The Title IX Coordinator, investigator(s), or hearing officer had a conflict of interest or bias for or against the parties (generally, or specifically in this matter) that affected the outcome of the matter.

(b) Impartial Appellate Officer. The appellate officer must not be the same person as the Title IX Coordinator, investigator(s), or hearing officer in the Grievance Process. Both Parties will be notified in writing when an appeal is filed and the appeal procedures will apply equally for both Parties.

(c) Statement of Support. Any non-appealing Party (or the University) will have 7 business days from the notification of an appeal to submit a written statement in support of the outcome.

(d) Final Determination. The decision-maker on the appeal will release a written decision within 21 business days from the date of the appeal that either:

- Affirms the hearing officer's determination regarding the Respondent's responsibility and its attendant disciplinary sanctions and remedies, if applicable;
- Remands the matter back to the live hearing stage for the hearing officer to remedy any procedural irregularity or consider any new evidence; or
- Reverses the hearing officer's determination of the Respondent's responsibility and the attendant disciplinary sanctions and remedies, if applicable.

(6) Grievance Process Documentation. University Compliance Services will retain all of the documentation included in the Grievance Process Track A (outlined in Section IX of this Policy) for seven years, in accordance with state and federal records laws and University policy. All documentation of records is private and confidential to the extent possible under law. Student records of the Grievance Process are disciplinary records under FERPA. Employee records of the Grievance Process are subject to the Freedom of Information Act (FOIA) and the Texas Public Information Act (TPIA), and included in the employee's official employment record.

(7) Grievance Process Track A Timeframe. The entire Grievance Process Track A, outlined in Section IX(D) of this Policy, including any appeal, will generally be completed in no more than 165 business days from the filing of the Formal Complaint.

However, at its discretion, the University may temporarily delay the grievance process or provide a limited extension of its usual time frames for good cause with written notice to the Parties of the reasons for and the delay. Good cause considerations may include, but are not limited to, the absence of a Party, the Party's advisor, or a witness; concurrent law enforcement activity or civil proceeding; or the need for language assistance or other accommodation. The time period in this section does not include the period the Parties attempted, but failed, to reach a resolution using the Restorative Practices Alternative, if applicable. In such a case, the Grievance Process timeframe will be extended by the time the Parties spent exploring that alternative.

Delay decisions will be made on a case-by-case basis. The University will not, as a matter of course, wait for the outcome of a concurrent criminal or civil justice proceeding to take action on a Formal Complaint in its Grievance Process. The University has an independent duty to respond to Formal Complaints of violations of this Policy.

E. Grievance Process Tracks B & C.

1. Application. Grievance Process Tracks B & C in this Policy apply in all instances covered by this Policy that do not meet the applicability requirements for the Grievance Process Track A in Section IX(D)(1) above.

a. Grievance Process Track B. This track applies when all of the following conditions are met:

- (i) the alleged conduct includes Sexual Assault, Dating Violence, Domestic Violence, Stalking, or Sexual Harassment *and* the alleged conduct occurred as off-campus conduct *and* the conduct substantially affect a person's education or employment with the University or poses a risk of harm to members of the University community; and
- (ii) the Respondent is a student (including a student employee) or employee at the time of the alleged conduct.

This track follows the investigation, hearing, and appeals processes and requirements set at Sections IX(D) (2-7) above.

(b) Grievance Process Track C. This track applies in all instances of alleged conduct under this Policy that are not covered by or Grievance Process Tracks A or B. These instances include allegations of conduct that potentially constitute Sex Discrimination, Sexual Exploitation, Unprofessional/Inappropriate Conduct, Retaliation, False Information or False Complaint, Interference with Grievance Process, or Failure to Report by a Non-Confidential Employee, as defined in Section VII(A-G) above.

(i) Written Notice of Formal Complaint. After receiving a Formal Complaint, the Title IX Office will provide written notice to the Parties of the alleged violations and the assigned grievance process track.

(ii) Investigations. The Investigations Unit in University Compliance Services handles investigations of alleged violations of this Policy, by students and employees, as described here. The investigator will prepare a written investigation report that will outline each of the allegations that potentially constitutes a conduct violation of this Policy, provide the timeline of the investigation, and fairly summarize relevant evidence, participant statements, and responses to questions, and include a statement of finding of violation or no finding of violation and the related rationale.

(iii) Investigation Report Referral. The completed investigation report will be provided to the appropriate decision-makers for disciplinary determinations, as follows:

- If the Respondent is a student, it will be referred to the Dean of Students for discipline decision, in accordance with University's student disciplinary procedures;
- If the Respondent is faculty, it will be referred to the Executive Vice President and Provost for discipline decision, in accordance with the University's policies for discipline and termination of faculty; and
- If the Respondent is staff, it will be referred to the Associate Vice President of Human Resources for discipline decision, in accordance with the University's policies for discipline and termination of staff.

(iii) Grievance Process Track C Appeals. Students and non-faculty employees can grieve the investigation findings and/or the assigned discipline outcome. Faculty can only grieve discipline outcomes. In order to appeal a finding or discipline, students will follow Chapter 11 of Appendix C to the General Information Catalogue. Students can access more information on Dean of Students' student conduct website here. Faculty will follow the procedures set out in HOP 2-2310, and staff will follow the procedures set out in HOP 5-2420. Faculty and staff can access more information about the appeal process at the Office for Inclusion and Equity's Procedure and Practice Guide.

F. Restorative Practices Alternative

The University recognizes that in some circumstances, pursuing restorative practices in lieu of the formal grievance process tracks is preferable to the parties involved. When appropriate, the University supports and encourages the benefits available through this alternative resolution path. You can learn more about this option here.

For Formal Complaints that would otherwise be within the Grievance Process Tracks A or B (above at Sections IX(D) and IX(E)(1)(a)), if the Parties were not pursuing an alternative resolution path, the following provisions apply:

(1) Availability. The Restorative Practices Alternative may be an appropriate means of addressing some incidents reported under this Policy. It is not available to address Formal Complaints of Sexual Assault, Dating Violence, Domestic Violence, Stalking, or Sexual Harassment against an employee where the Complainant is a student.

(2) Agreement and Approval Required. To invoke this alternative, after the parties have been provided a copy of the written notice of a Formal Complaint, both parties must, in writing, voluntarily agree to use this alternative. The Restorative Practices Alternative means the parties forgo the Grievance Processes (including the investigation and hearing, depending on when the parties agree to engage in the alternative). The Title IX Coordinator's approval of the parties' voluntary agreement is necessary to proceed with the alternative.

(3) Revocation of Alternative. At any time prior to agreeing to a resolution, any party has the right to withdraw from the Restorative Practices Alternative, and resume the appropriate grievance process of the Formal Complaint.

G. Ongoing Training

The University's commitment to preventing and raising awareness of the harm resulting from the conduct prohibited in this policy includes offering ongoing education to both employees and students. To that end, this policy will be published on the University's website. Information regarding this policy and related policies will also be included in orientation materials for new students, faculty, staff, and

other University affiliates. Appropriate compliance training sessions will also be conducted on an ongoing basis. Training sessions will include information on how and where to report incidents and resources available, as well as safe and positive options for bystander intervention that may be carried out by individuals to prevent harm or intervene when there is a risk of misconduct being inflicted on another person. In addition, the University Title IX Coordinator, Deputy Title IX Coordinators, and all investigators and hearing officers receive training each academic year about violations, investigatory procedures, due process requirements, conducting a hearing, state and federal laws, and University policies related to or described in this policy. The University is committed to protecting the safety of all persons involved, including complainants and witnesses, and the due process rights of respondents, as well as promoting accountability.

X. *The University of Texas at Austin Title IX Office.*

The Title IX Office is committed to supporting the University's mission to create and maintain an educational and work environment free from all forms of sexual assault, interpersonal violence (including domestic and dating violence), stalking, and sexual harassment (including harassment on the basis of sexual orientation, gender identity, gender expression, or pregnancy status), where students, faculty, and staff can learn, work and thrive. The Title IX Office seeks to provide leadership pertaining to the Title IX regulations, as well as develop and implement best practices for prevention, training, resources and support services at The University of Texas at Austin. To learn more about the Title IX Office, including our services, how to report, and frequently asked questions, please visit the Title IX Office website.

This Policy will be made available to all University online at <https://titleix.utexas.edu/policies> [insert website link] and in University student catalog(s) and any employee handbook of operating procedures. Periodic notices will be sent to University administrators, faculty, staff and students about the Policy, including but not limited to at the beginning of each fall and spring semester. The notice will include information about conduct prohibited under this Policy, including the Formal Complaint procedure, the University Grievance Process, and available resources, such as support services, health, and mental health services. The notice will specify the right to file a Formal Complaint under this Policy, right to file a police report to law enforcement, the Title IX Coordinator's contact information, and will refer individuals to designated offices or officials for additional information.

XI. Related Information

Visit the **Title IX Office website** (<https://titleix.utexas.edu/policies>) for a list of state and federal laws and regulations, Regents Rules, and other University rules and policies related to this Policy.

XII. History

Last review date: August 12, 2020

- Substantive and editorial changes made August 2020 to comply with state and federal law changes.
- Substantive and editorial changes made December 2019 to comply with state law changes.
- Editorial changes made August 8, 2018
- Editorial changes made February 17, 2016
- Policy replaced the former HOP 3-3030 "Sex Discrimination and Sexual Harassment" and HOP 3-3040 "Sexual Misconduct" retired effective July 1, 2015 when HOP 3-3031 became effective.
- Editorial changes made July 10, 2015 and July 17, 2015

Next scheduled review: August 2022

I. Scope & Audience

None

II. Definitions (specific to this policy)

None

III. Website (for policy)

<https://policies.utexas.edu/policies/hop/3-3031>

IV. Contacts

None

V. Forms & Tools

None

VI. Frequently Asked Questions

None

VII. Related Information

None

VIII. History

None

EXHIBIT 65

Message

From: Fenves, Gregory L [fenves@utexas.edu]
Sent: 4/8/2019 4:24:12 PM
To: Dukerich, Janet M [janet.dukerich@austin.utexas.edu]
CC: Shockley, Carmen L [cshockley@austin.utexas.edu]; Baughman, Rebecca L [rbaughman@utexas.edu]
Subject: Re: Letter urging the positive conclusion of Dr. Evdokia Nikolova's tenure appeal

Since the letter was addressed to me, it should be a response on my behalf. I occasionally get this type of letter and will forward them to you. I know there was one in the a Final Arguments package so no response is needed.

Greg

On Apr 8, 2019, at 10:42 AM, Dukerich, Janet M <janet.dukerich@austin.utexas.edu> wrote:

Hi Greg – do you want us to respond on your behalf, or on behalf of the provost? Thanks, Janet

JANET M. DUKERICH | Senior Vice Provost for Faculty Affairs | Professor, Management | Harkins & Company Centennial Chair
The University of Texas at Austin | Office of the Executive Vice President and Provost

From: Fenves, Gregory L <fenves@utexas.edu>
Sent: Monday, April 8, 2019 5:17 AM
To: Dukerich, Janet M <janet.dukerich@austin.utexas.edu>
Cc: Shockley, Carmen L <cshockley@austin.utexas.edu>
Subject: Re: Letter urging the positive conclusion of Dr. Evdokia Nikolova's tenure appeal

Could you respond briefly that do not promote means not at this time. I don't think I've been responding to letters of this time sent to me directly.

Sent from my iPhone

On Apr 7, 2019, at 8:38 PM, Dukerich, Janet M <janet.dukerich@austin.utexas.edu> wrote:

She went up early for tenure and was denied. We only consider cases that have a pending terminal appointment for final arguments. Thanks Janet

Sent from my iPad

On Apr 7, 2019, at 7:59 PM, Fenves, Gregory L <fenves@utexas.edu> wrote:

I don't see this on the list of Final Arguments.

Greg

Begin forwarded message:

From: Mattan Erez <mattan.erez@utexas.edu>
Subject: Letter urging the positive conclusion of Dr. Evdokia Nikolova's tenure appeal

Date: April 7, 2019 at 7:53:28 PM CDT
To: "Fenves, Gregory L" <fenves@utexas.edu>
Cc: "Tewfik, Ahmed" <tewfik@austin.utexas.edu>

Dear President Fenves,

Please find the attached letter conveying my strong feelings about the damage to the ECE department that will result from denying tenure to Dr. Evdokia Nikolova. For convenience, I am also copying the content of the letter below.

Respectfully,

Mattan Erez.

Dear President Fenves,

I write to strongly urge you to favorably consider Dr. Evdokia Nikolova's appeal of her tenure-case denial. Given the urgency of this case and the, hopefully, large number of similar letters you are receiving, I will be very brief. Losing Dr. Nikolova, which will certainly happen if her appeal is not granted, will have a devastating effect on the ECE department and our ability to recruit and retain female faculty.

The main reason I believe this to be true is that denying her tenure at this point will effectively send the message that ECE has a serious problem with awarding tenure to female faculty members and that women are not treated equally as men. I would very much hope that this is a false message, but given the denial of tenure under similar circumstances to Dr. Miryung Kim a few years ago, the message would be sent nonetheless.

The perceived unfairness relates to the determination of what constitutes early tenure and its associated higher bar. In the case of Dr. Nikolova, Dean Wood's letter makes it clear that the timing of the case was the determining factor in the current denial of tenure decision. However, Dr. Nikolova has been an Assistant Professor for longer than typical already and determining her case as early appears inconsistent with established norms, at least established norm for men and other departments. Dr. Kim's case was also denied based on it being marginally early.

Of course, I would not be writing if I do not also believe that Dr. Nikolova warrants tenure and brings value to the department. I believe she does. The near-unanimous departmental vote and the determination of the Cockrell School's Promotion and Tenure Committee suggest that my opinion of this is not unique. In addition to the detrimental impact on recruiting, losing Dr. Nikolova would be bad academically as well. Her research is in an important area, her intangible contributions are high, and she teaches critical courses, for which we lack instructors, well.

I conclude by repeating my main message: Dr. Nikolova has earned tenure, is valued in the department, has spent more than typical time as an Assistant Professor, and denying her tenure will have a chilling effect on the department's future. Please consider these facts when deliberating on her appeal.

Respectfully,

Mattan Erez, Professor
Temple Foundation Endowed Faculty Fellow
Electrical and Computer Engineering
The University of Texas at Austin

<Erez_NikolovaTenureAppeal_0419.pdf>

EXHIBIT 66

Message

From: Evdokia Nikolova [nikolova2009@gmail.com]
on behalf of Evdokia Nikolova <nikolova2009@gmail.com> [nikolova2009@gmail.com]
Sent: 5/7/2019 1:24:19 AM
To: Christine Julien [c.julien@utexas.edu]
Subject: Re: Peer Teaching Evaluation

Christine,

I am attaching the completed form.

Thanks for your time and feedback,

Eddie

On Mon, May 6, 2019 at 3:27 PM Christine Julien <c.julien@utexas.edu> wrote:

Eddie--

I made the two factual corrections (attached). I think the remaining components are best suited for the pre-observation information and the instructor reflection.

Let me know if you want to chat in person.

Christine

On Mon, May 6, 2019 at 3:17 PM Evdokia Nikolova <nikolova2009@gmail.com> wrote:

Christine,

Thanks for the revisions, I do appreciate it.

A couple of factual corrections:

1) The only prior time I taught Game Theory at UT was in Spring 2014 (listed as EE 381V). At that time the course was completely different: it had entirely different content (more introductory) and entirely lecture based by me with homeworks, a midterm and a final project. This time I deliberately wanted to teach a more advanced class and a different topic focus (mechanism design), in part for my own students to get training in mechanism design research and in part for others to get a more advanced look into the state-of-art research in game theory and mechanism design.

The courses that you refer to for 2017 and 2015 happen to have the same course number EE 381V, however those offerings were for a completely course "Advanced algorithms". So these need to be removed from the form.

2) Another correction is that 30% of the grade is submitting paper summaries of the paper to be covered, at the beginning of class. (in the syllabus, I wrote "paper summaries and class participation").

One note on your suggestions for improvement:

I do feel that, for students to understand a paper with difficult mathematical material, an in-depth presentation of that technical content is important and it definitely cannot be attained in a shorter conference-length time frame. Understanding and gaining the mathematical expertise is critical for doing research in this area and a frequent concern I hear from my theoretical colleagues is that they cannot gain much from 20-min conference

talks since these often do not have time to get into any proofs and only give a very superficial high-level picture of the research. Reading a paper is also not a guarantee that one would understand the proofs so in my experience such technical papers are best studied in study groups in that same format with one person presenting technical content in depth and for a sufficiently long time. We have had some more "dynamic" presentations previously where the student alternated between slides and the doc-cam, writing out proof steps on paper. We covered these different presentation style options and the style was the student's choice. The student who presented last time got a lower grade since in my and my TA's opinion (Isidoros) the student didn't put enough effort and especially avoided getting into any proofs, that were a key part of the paper. In that sense, my class format followed the tradition of my field for what is considered to be most effective for someone *motivated* to learn more in-depth about the content of a given research result: typically an hour long talk with questions during or after. You may be right that alternative class formats may be more effective but I have yet to encounter one that works well for theory.

One thing that *would* have helped in my opinion would have been a smaller class size and a smaller classroom that allows for a more intimate discussion and student engagement but as it turned out 32 people decided to take the class so I had to do the best I can with that number. Also I had a remote student (that I wasn't even told about ahead of time) and that made many discussions with awkward pauses having to wait for the single mic to be passed around often from one end of the enormous classroom to the other.

Side note on other ideas for improvement:

I have explicitly sought student feedback. Midway through the semester I gave a survey soliciting student feedback and ideas for improvement. I only received one response and consequently also discussed this verbally in class. One suggestion was for the written paper summaries to be handed after class rather than beginning of class since students felt that they understood the paper better after the presentation. However, I was concerned that if the summaries were due after class, the students might not read the paper before hand. Also apparently 7 of the 32 students in my class were all PhD students of one advisor in Aero-Astro (Ufuk Topku) all working in some aspect of stochastic games and they were wishing to have studied stochastic games as part of the course to help with their own research -- though by that time the syllabus was already fixed: I gave the full list of papers in the very first lecture so it's fair to the students to know what paper they are signing up for to present. One student comment suggested dedicating the last 15 min to students writing feedback instead of verbal discussion. My feeling is that that was related to a student being shy to speak up in a class discussion and I felt that having a class discussion would still be valuable.

I'll work on the form and get that back to you.

Thanks,
Eddie

On Mon, May 6, 2019 at 9:46 AM Christine Julien <c.julien@utexas.edu> wrote:
Eddie--

Please see the attached revision. If you note any specific factual errors, please let me know so that I can correct them.

I am sorry that I could not stick around directly after your class to discuss my observations with you. I did need to grab something to eat before more meetings. I do not think that my level of work, sleep, or hunger are reflected at all in my evaluation. And as I said in my email, I'm happy to meet to discuss my observations (and other feedback you might be interested in) at any point.

I'm also sorry that we did not get a chance to meet beforehand to discuss the course at length. I didn't have the Pre-Observation form (page three in the attached) filled out before the course, so I didn't have a lot of expectation going in to the observation about what your expectations of the students in the course are. We did chat on the phone late at night the day before class, but this discussion was pretty high level; that was the first time I saw the syllabus, and I recall that at the time of that discussion you said you also needed to refresh yourself on the contents of the paper for discussion in class.

Thanks,
Christine

On Sun, May 5, 2019 at 7:41 PM Evdokia Nikolova <nikolova2009@gmail.com> wrote:

Hi Christine,

I just now read your evaluation. I feel there is nothing positive in it. This is the first time I am offering a graduate course in this format [previous course offerings you cite are for a completely different course on advanced algorithms] and, despite some of the challenges, I feel this format has been beneficial for the students in multiple ways.

Also coming during one of the last course lectures does not help, when everyone is tired, students are jaded and less attentive. I am myself already going through a lot of turmoil this semester and it's been really hard to keep my spirits up and trying to keep a positive attitude in the class. Especially in light of the Dean's evaluation of my teaching, this comes as just another nail in my coffin as it definitely won't help in a potential future tenure evaluation.

This is a unique format for an advanced graduate class which likely has its pluses and minuses, its emphasis has been on self-motivation and self-independence for students to better prepare them to pursue research as opposed to just learning material from a book as most graduate courses seem to do.

Reviewing multiple fundamental and very mathematical state-of-art research papers in the area of game theory and mechanism design is not easy for a single person and is best done in a format with multiple people where presentation and discussion of the material are a way to better grasp its contents and significance. Some lectures have higher energy than others, it depends on the paper covered, the interest of the students and the energy of the presenter. We have had some amazing presentations and on multiple occasions, both verbally and in writing I have discussed with students expectations of a good presentation which is itself a really important skill in research that students don't get exposed to and learn much about until very late in their PhD or postdoc years. I feel looking at each other's presentations the students have gotten more motivated to do a good job and have learnt a great deal on presenting, in addition to learning about the state-of-art research we have been covering.

I know you were overworked and tired and you hadn't eaten at the end of the lecture so you couldn't stay to discuss your impressions with me after the class before putting them in writing. Ultimately you can write whatever you think is right but the timing of this does matter considerably. I do appreciate your comments and want to improve on them but again this is the first time I have offered this course in this format. If you can add some positive things and tone down some of the negative, I would appreciate it -- again it's all up to you.

Thanks,
Eddie

On Thu, May 2, 2019 at 7:50 PM Christine Julien <c.julien@utexas.edu> wrote:

Eddie--

Attached is the form I filled out for your peer teaching evaluation. It was difficult to do, given the fact that it was a student lecturing and the form isn't really made for that. I tried to provide my feedback in that context as best I could.

There's a first page (pre-observation information) and reflection that should both be written by you (probably sooner rather than later, since these were technically due last week). I'm also happy to meet to discuss my observations; just let me know what time next week might work for you.

Christine

Dr. Christine Julien | c.julien@utexas.edu | 512.232.5671
Professor, Annis & Jack Bowen Professorship in Engineering
Department of Electrical and Computer Engineering
The University of Texas at Austin
<http://mpc.ece.utexas.edu>

--
Evdokia Nikolova
<http://users.ece.utexas.edu/~nikolova/>

--
Evdokia Nikolova
<http://users.ece.utexas.edu/~nikolova/>

This message is from an external sender. [Learn more about why this matters.](#)

--
Evdokia Nikolova
<http://users.ece.utexas.edu/~nikolova/>

This message is from an external sender. Learn more about why this matters.

Example Form for Peer Evaluation of Teaching for Spring 2019 (Version 5.0)

Prof. Brian L. Evans, Dept. of Electrical and Computer Engineering, bevans@ece.utexas.edu

Peer teaching evaluation is intended to be part of an on-going constructive dialogue about teaching with faculty colleagues. The evaluation encourages time for reflection and action.

Perhaps a theme to consider is “teaching for effective learning”. This phrase is a reminder that “actions (teaching and learning) are interlinked and contextually informed by who the students are, the types of skills/knowledge being taught, discipline, etc.” [1]

Peer teaching evaluations inform a holistic view of our teaching [2-4] during tenure, promotion [3], post-tenure [4], annual and mid-probationary period review. They complement one’s teaching statement, course information, and course instructor survey results. [5]

Here’s the general flow of a peer evaluation of teaching suggested by the Provost Office [2] and each of the following steps has one page of content later in this document:

1. ***Pre-Observation Meeting:*** The peer evaluator would discuss with the instructor course content and learning objectives as well as outcomes from previous peer evaluations and the class period to be observed. The instructor would write the initial draft of this section.
2. ***Classroom Observation:*** The peer evaluator would attend the class as an observer and not as a participant or leader, so as to observe the natural flow of the class and respect the peer relationship with and the academic freedom of the instructor. It would help if the evaluator arrived early, sat in the back of the room so as not to disrupt the class, and stayed a few minutes afterwards. The evaluator would take notes on content, student interactions, organization, verbal style, non-verbal cues, and use of media during the class time.
3. ***Post-Observation Meeting:*** The peer evaluator would identify teaching strengths, offer suggestions, evaluate course instructor survey rating trends and comments, and review the syllabus. The evaluator would meet with the instructor to discuss write-ups for parts 1-3.
4. ***Reflective Summary:*** When completed regularly, they can help improve one’s teaching and form a basis for teaching statements for promotion, annual, or post-tenure review.

Upload the signed report to UT Box and send the link to Prof. Evans at bevans@ece.utexas.edu, Dept. Chair at tewfik@austin.utexas.edu, and Dept. Executive Asst. at jac.erengil@utexas.edu.

References

- [1] Prof. Katie Dawson, UT Austin Provost Teaching Fellow 2018-19, Personal Correspondence, January 16, 2019.
- [2] Peer review of teaching, Faculty Innovation Center, <https://facultyinnovate.utexas.edu/peer-observation>
- [3] 2018-19 General Guidelines for Promotion and Tenure of All Faculty Ranks (tenured, tenure-track and non-tenure-track), esp. Section C.3.e, available at <https://utexas.app.box.com/v/pt-18-19-guidelines>
- [4] 2018-19 Guidelines for Comprehensive Periodic Review of Tenured Faculty, <https://utexas.app.box.com/v/18-19-guidelines-comprehensive>
- [5] Prof. Brent L. Iverson, Dean of Undergraduate Studies, UT Austin, one of five voting members of the President’s Tenure and Promotion Committee, April 11, 2018, e-mail correspondence:

“I believe the point of the whole exercise of teaching evaluation as part of the promotion process is to put in place a set of easy to follow longitudinal procedures that will assist all faculty in becoming better teachers. The point is not to identify bad teachers and eliminate them, it is to make sure everyone has the support they need to

develop into the best teachers they can be after first stepping into the classroom. That is why longitudinal observations followed by frank, honest assessment then reflection by the person being observed is so important.”

1. Pre-Observation Meeting – Written by the Instructor

Course Number, Title, Instructor:

Semester: _____ Type of Course: _____ Required _____ Elective _____ Graduate _____
 Enrollment: _____ Lecture hours/week: _____ Lab/Recitation hours/week: _____

1. Pre-Observation Meeting

- What is the course content? Where does the course fit into the program of study?

This is an advanced PhD level class focused on preparing students for research in the field of Algorithmic Game Theory and Mechanism Design. It consists of several introductory lectures on Game Theory and Mechanism Design and 20+ technical research papers in the field ranging from classics that were published several decades ago, to state-of-art research published in the last decade. Since multiple students both at UT ECE and other Engineering departments (Aero-Astro, Mechanical, Civil) are doing research involving some aspect of game theory and mechanism design, such a course fills an important gap in the students' formal education. I note that a class on Mechanism Design happened to be taught in the Department of Economics this semester (my understanding is that this is not a regularly occurring class), though courses taught in the Economics department are typically less accessible to Engineering students, do not have a computational/algorithmic component and do not cover engineering applications, which my course included.

Course Content

- What learning and growth do you want students to experience in the course?
- How are you assessing their learning and growth?

I want students to get exposed to and learn as best they can classic and state-of-art research results in the field along with mathematical techniques for proving such results. One component of the course was learning how to critically read, understand and assess research papers, including understanding limiting assumptions and coming up with open research questions. Another important component was learning how to effectively present a theoretical research paper.

The students learning and growth are assessed through written paper summaries that students had to submit summarizing the research paper covered in that class. Their learning and growth are also assessed through the evolution of research presentations, for which I gave written feedback with suggestions for improvement to the individual presenter and more general presentation guidelines for the entire class.

Course Objectives

- What changes did you make based on previous peer evaluations of teaching?

This is the first time I taught the course with this content and format. As such previous peer evaluations were not available / applicable. The only prior time I taught Game Theory at UT was in Spring 2014 (listed as EE 381V). At that time the course was completely different: it had entirely different content (more introductory) and was entirely lecture-based by me with homeworks, a midterm and a final project. This time I deliberately wanted to teach a more advanced class and a different topic focus (mechanism design), in part for my own students to get necessary training in mechanism design research and in part for others to get a more advanced knowledge in the state-of-art research in algorithmic game theory and mechanism design and inspire students to do further research in the area.

Previous Peer Evaluations

Class Meeting
to be Observed

- What's the context of the class period to be observed? What has happened before?

During the class observed, a student presented a research paper, which was followed by a class discussion. The course included several introductory lectures in the beginning and 20+ research papers that were a selection of the classics and state-of-art research papers in the field. Some papers were linked and others were independent. The particular paper topic covered during the observed class was self-contained and independent of the previously covered material.

Instructor Evdokia Nikolova _____ Date of Meeting 04 / 30 / 2019

Main Part of Class Meeting	Introduction
Learning Environment Conclusion	<p>2. Classroom Teaching Observation – Written by the Peer Teaching Evaluator</p> <p>Enrollment: _____ Attendance: <u>24</u> Class: <u>EE381V</u> Instructor: <u>Nikolova</u> _____</p> <p>Start Time: <u>2pm</u> End Time: _____ Classroom: <u>EER. 1.518</u> Evaluator: <u>Julien</u> _____</p> <ul style="list-style-type: none"> • How did the introduction review material and give organization/context for the class? <p>Class began when a student began the presentation of a paper to be discussed for the day (Manipulation of Stable Matchings using Minimal Blacklists). This presentation is 35% of the student's final grade.</p> <ul style="list-style-type: none"> • What views into the material did students gain? Text, equations, diagrams, visualizations? • Connections to other material in the course? Connection to current events? • How did the instructor engage the students? How did the students and instructor respond? <p>The students were all expected to have read the paper ahead of time (and have submitted a summary of the paper). The instructor interjected during the student presentation for clarifications. After the student's presentation completed (about 40 minutes into class), the TA and instructor asked additional questions. The final 20 or so minutes of class were focused around a discussion of how the presented algorithm relates to modern mobile dating apps.</p> <ul style="list-style-type: none"> • How did the instructor or students summarize the main ideas at the end of the class period? <p>• How open, positive and supportive was the learning environment?</p> <p>• How did students engage in learning? How could they be more engaged?</p> <p>The course is structured as a research seminar, so giving the students a chance to present difficult technical material is an important instructional component. The student's presentation was a direct presentation of the paper, the students were expected to have already read the paper, and students did not often interject with questions. Many students were looking at their computers or doing other work.</p> <ul style="list-style-type: none"> • Understandability of spoken language? Voice volume, voice quality, and rate of delivery? • Effective body movement, gestures, and eye contact with students? <p>The student presenter was clear and used clear slides to convey the material from the paper. The instructor's questions were clear and audible, and she used her voice and body language to include the entire classroom even though she was technically interacting with the single speaker.</p> <ul style="list-style-type: none"> • Marker/chalkboard content clear? Easy to read visuals? • How effective was the use of electronics by the instructor? <p>N/A</p> <p>Peer Evaluator _____ Date of Observation _____ / _____ / _____</p>
Verbal/ non-verbal	
Use of Media	

3. Post-Observation Meeting with Peer Evaluator and Instructor – Written by Evaluator

Instructor Strengths in Teaching for Effective Learning

The instructor's role in this particular lecture was to foster the discussion since the lecture itself was presented by one of the students. In addition, the instructor has presumably given some guidance or examples of the expectations of the presentation itself.

Suggestions for Improvement in Teaching for Effective Learning

In course content, presentation styles, and learning environment. For ideas on well-being in learning environments: <https://www.cmhc.utexas.edu/wellbeing/instructionalpractices.html>

To improve the engagement of the students, the instructor could consider alternative formats. While giving the students a chance to present technical material is important, limiting the time to the length (for example) of a conference presentation could be beneficial. There are also additional non-lecture based formats the instructor could consider for engaging the students with the material. For instance, when this presenter brought up a connection of the content to dating apps, the students were much more engaged. However, the student's connection between the algorithm and dating apps was a bit tenuous. I would encourage the instructor to challenge students on these sorts of aspects. This is potential learning opportunity since connecting the material to things the students identify with has the potential for engagement. This kind of discussion could completely replace the presentation of the paper (or fill the class time following a briefer presentation of the paper). Since everyone in the class was expected to have read and already summarized the paper; it's not clear what value there is in having someone present all of the details.

The instructor might also consider alternative mechanisms for conveying the material rather than a static presentation by a student.

Recent course instructor survey comments to improve the learning environment

Previous course instructor survey comments are available at <https://utexas.app.box.com/>.

The comments on the previous CIS are not available. Scores (for what they're worth) for the prior offering of this course (Spring 2014) were 4.1/4.1.

Review of course syllabus

- Teaching approaches and student assessments match stated goals and outcomes
- Roles and responsibilities of the students in the learning process clearly stated
- Weighting of assignments and context for numeric grades (A, A-, B+, etc.)

This is a seminar course in game theory. The syllabus does not list prior background in game theory as a prerequisite, though the course contains a few introductory lectures at the beginning. Grades are based on the presentation of a research paper, a combination of class participation and paper summaries that are submitted at the beginning of each class, and a research project (with grades evenly weighted across these three categories).

Peer Evaluator _____

Date ___/___/___

4. Reflective Summary Written by the Instructor (based on items 1-3 above)

The reflective summary gives the instructor an opportunity to reflect on the feedback from the peer teaching evaluator. The reflection could also be reused in teaching statements for tenure, promotion, annual, post-tenure, and mid-probationary evaluation. Here are example questions to consider in your reflection.

- What are your strengths in teaching this course? Guiding class activities?

My strengths are in guiding student learning through an appropriate concise selection of the state-of-art research in algorithmic game theory and mechanism design and motivating students to develop critical skills of reading and assessing as well as presenting research papers, which I believe fills an important gap in graduate students' education (especially the presentation part). I concentrate on developing critical paper evaluation and presentation skills in my own PhD students, who have been praised by others for their depth of knowledge, competence and thesis proposal / conference presentations.

- How could you improve this particular course to improve student learning?

I have explicitly sought student feedback. Midway through the semester I gave a survey soliciting student feedback and ideas for improvement. I only received one written response and thus consequently I also sought and discussed student feedback verbally in class. One suggestion was for the written paper summaries to be handed after class rather than beginning of class since students felt that they understood the research paper covered better after the in-class presentation. This justifies that a detailed paper presentation is very beneficial to student learning of the material in addition to the students's requirement to read the paper ahead of time. These are very involved and mathematically strenuous papers that require many hours of dedicated focus for proper understanding and a study group type discussion following a presentation I feel only adds to the individual effort of a person reading a paper by themselves.

One student comment suggested dedicating the last 15 min to students writing feedback instead of verbal in-class discussion. I agree for some students this is useful and I welcomed feedback in office hours for students that prefer this method. I felt that allowing for a class discussion is valuable for everyone present but do understand that written feedback is another valuable addition to the student learning.

- How could you improve the quality and timeliness of feedback on student work?

I made sure to provide very quick feedback to every student presentation personally to the student (usually immediately after lecture) and when I felt it was warranted, with more detailed guidelines to the entire class. I also ensured that my TA gave very prompt feedback to the 30+ written paper summaries (usually within a day) so the students could quickly improve on their written exposition and their critical reading and understanding of the papers. Students have expressed gratitude for the fast feedback and I have not heard any concerns from students on the quality and timeliness of feedback on their work.

- What other ways you could help improve well-being in the class learning environment?
For ideas, see <https://www.cmhc.utexas.edu/wellbeing/instructionalpractices.html>

Pasting from the above website: “One instructional practice that all students can benefit from is knowing what is expected of them by being given a clear framework they can use to anchor their knowledge and progress (Balgopal, Casper, Atadero, & Rambo-Hernandez, 2017).” Without knowing this quote, this was precisely my thinking and goal at the beginning of the semester and for that reason on the first day of class I presented the exact requirements, course content and expectations of the students, as well as giving them a choice to sign up for presenting a research paper of their choice on a date of their choice.

“Finding ways to provide structured, intentional and transparent assessment practices can limit anxiety and improve a student’s learning, retention and testing performance (Chiou, Wang, & Lee, 2014; Cross & Angelo, 1988). Encourage them to ask questions and seek help.” Without knowing this quote as well, this has been my guiding principle throughout: for every presentation grade I offered in writing detailed feedback to the student presenter listing the positives in their presentation as well as suggestions for improvement that would help their presentation skills in the future. As part of the course format with class discussion, I was encouraging questions and continued emphasizing my availability in office hours and outside of office hours when needed.

Reflections on the peer evaluator suggestions for improvement (e.g., “Since everyone in the class was expected to have read and already summarized the paper; it’s not clear what value there is in having someone present all of the details.”)

I do feel that, for students to understand a paper with difficult mathematical material, an in-depth presentation of that technical content is important and it definitely cannot be attained in a shorter conference-length time frame. Understanding and gaining the mathematical expertise is critical for doing research in this area and a frequent concern I hear from my theoretical colleagues is that they cannot gain much from 20-min conference talks since these often do not have time to get into any proofs and only give a very superficial high-level idea of the research. Reading a paper is also not a guarantee that one would understand the proofs so in my experience such technical papers are best studied in study groups in that same format with one person presenting technical content in depth and for a sufficient length of time (typically an hour).

In that sense, my class format followed the tradition of my field for what is considered to be most effective for someone *motivated* to learn more in-depth about the content of a given research result: typically an hour long talk with questions during and/or after the presentation. That said, I am open to considering alternative class formats.

We have had more "dynamic" presentations previously where the presenter alternated between slides and the doc-cam, writing out proof steps on paper. I covered these different presentation style options and the style was the student's choice. The student who presented during the evaluated lecture received a lower grade since in my and my TA's opinion the student didn't put enough effort and especially avoided getting into any proofs, that were a key part of the paper. There were a lot of very strong presentations during the semester and I feel these students

increased their own standards based on what they saw were effective presentations prior to theirs.

Any concerns, recommendations, or suggestions you might make about the process?

Yes. The lecture observed was in the last couple of weeks of class. This is a time when everyone is tired, students are extremely preoccupied with their final projects and exams and even the most engaged students sometimes are not as engaged at that time of the semester. Thus, I feel an observation should not be completed in the last weeks of class, which may not be an accurate representation of a typical lecture. An observation of lecture towards the beginning or middle of the semester would be more beneficial to the instructor in terms of having time to brainstorm on and incorporate suggestions for improvement, as well as more representative of a typical class, especially for a class that is offered once in 2-5 years.

I feel the evaluation scheduling is something that needs be acted on at the start of semester and not as an after-thought in light of a deadline at the end of the semester, putting undue strain on both the peer evaluator and the instructor during the end-of-semester time crunch.

Instructor _____ Evdokia Nikolova _____

Date _05_/_06_/_2019 _____

EXHIBIT 67

Teaching Evaluation of Evdokia Nikolova

Peer review by Craig Chase – April 2, 2015

I attended Evdokia (Eddie) Nikolova's lecture of EE381V, "Advanced Algorithms" on April 2, 2015. There were approximately fifteen graduate students in attendance.

Overall Evaluation

Professor Nikolova quite obviously cares deeply about teaching and has a profound understanding of her discipline. I attended one of Eddie's lectures for her graduate course, EE381V "Advanced Algorithms" in Spring 2015 and met with Eddie afterwards to discuss her approach to teaching generally and her work with EE381V specifically. I came away from this experience very impressed with Eddie's teaching.

Clarity and effectiveness of presentation:

On the day of my observations, Eddie presented material on algorithms for constraint satisfaction problems. She began the class by summarizing (briefly) the results from the previous lecture, which had introduced the Unique Games Conjecture, an important recent research result in the area of constraint-satisfaction problems. The Unique Games Conjecture suggests that in important general cases efficient algorithms for constraint-satisfaction problems cannot exist. Eddie used her summary of this result to both motivate and place into context her current lecture, which revolved around efficient algorithms for constraint-satisfaction problems where most (but not all) constraints are satisfied. This complex technical tightrope (between the intractable variations of the problem and the solvable variations) can be very difficult to understand, and the subtleties of the distinctions are easily lost upon non-experts. Nevertheless, even as an outsider to the field, I felt I was able to follow the "big picture" ideas regarding what Eddie was trying to explain, why it was important, as well as how the algorithm itself was developed.

Eddie used hand-written notes on the document camera for her presentation. She derived methodically the algorithm that she was presenting, using the notes to capture the step-by-step elements of the algorithm as well as the proofs that the algorithm was correct. The notes themselves were extremely well organized and very neatly written. I confirmed after the lecture with Eddie that she distributed those notes to her students. For the topic she was presenting, I find this combination of real-time derivations of the algorithm/proofs along with the distributed lecture notes to be much preferable to power-point.

Observations of Students:

Eddie's students were attentive and asked several questions during the lecture. The students appeared to be very familiar with the algorithm background (much more so than I was), related to the current lecture and fully aware of the significance of the approximation algorithm that Eddie presented. I noted

that one of the students attending the class was a previous teaching assistant of mine, and I asked that student informally for his feedback. While only a single anecdote and not necessarily reflective of the experience of every student, my previous TA had very positive comments for Eddie and her class.

One suggestion that I had for Eddie (and I provided this suggestion to her during our meeting) was that she repeat student questions aloud to the class as a whole. Some of her students spoke somewhat quietly while asking their questions, and while Eddie could hear the question, I (and I presume several other students) could not hear the question, only Eddie's response. Beyond this minor issue, I found that Eddie managed the classroom experience extremely well and created a learning environment that is entirely appropriate for a graduate course.

Summary

Eddie is supremely competent in her field and an excellent lecturer and teacher. If I were a student, I would certainly seek out her classes. She provides good context for the material she is presenting, is well organized in her approach and methodology, and she creates excellent materials for her students to use in their out-of-classroom study. I provided Eddie with two small suggestions for improvement; before responding to student questions, she should try to restate the question so that the entire class can hear and understand the question. I also encouraged Eddie to communicate, as part of her lecture summaries, her expectations of exactly what the students should take away from the lecture. In the context of a deeply-technical discussion of approximation algorithms to constraint-satisfaction problems, should the students know the algorithm(s) she derived, the proof techniques for the algorithm, or the framework within which the constraint-satisfaction problem is relaxed so that the problem becomes tractable, or all of the above? I note that, based on my anecdotal conversations with the student I knew in her class, the students do feel they understand what is expected of them (in part through the homework assignments), so my suggestion addresses a very minor concern. Overall, EE381V is an excellent class, well run and well taught by an outstanding young professor.

I met with Eddie and provided feedback from this review on April 2, 2015.

A handwritten signature in blue ink that reads "Craig M. Chase". The signature is fluid and cursive, with "Craig" on top and "M. Chase" below it.

Craig M. Chase, Ph.D. Associate Professor
Raytheon Faculty Fellow in Engineering
Electrical and Computer Engineering
The University of Texas at Austin



ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT
Cockrell School of Engineering

1616 Guadalupe St. • UTA Building, 7th Floor • Austin, Texas 78701
<http://www.ece.utexas.edu/>

March 31, 2017

Constantine Caramanis
Associate Professor
Fluor Centennial Teaching Fellowship
Dept. of Electrical and Computer Engineering
The University of Texas at Austin
Tel. (512) 471-9269
constantine@utexas.edu

Teaching Evaluation for Evdokia Nikolova:

On Monday, March 27th, 2017, I observed Evdokia Nikolova teach EE381V – Advanced Algorithms. This course develops advanced concepts from algorithms, complexity, approximation and algorithms and randomized algorithms. It is a highly technical class, aimed at developing both techniques and also their rigorous analysis. The course requires using technical material from many areas, including probability/stochastic processes, algorithms, optimization and combinatorics.

In the class I attended, Evdokia began the discussion of the Unique Games Conjecture and its implications. Briefly this is an assumption that has largely become a complexity primitive similar to the concept of NP completeness. In fact, it is in many interesting settings largely complementary to NP completeness.

In the class, Evdokia explained the Unique Games Conjecture, first at a higher level, aiming to convey the key intuition of what it means and what its implications might be, and then in more full technical details. In between doing these two things, she also gave a strong motivation for why we might care. She linked back to work she had done in a previous class, discussing the approximability of MAXCUT. MAXCUT is a celebrated problem in randomized algorithms because of the Goemans-Williamson SDP relaxation and rounding approach, which gives a guarantee of a 0.878... approximation. It is known that unless P = NP, MAXCUT cannot be approximated to better than a 0.94... however, under the Unique Games Conjecture, the MAXCUT approximation ratio is unimprovable.

I found her approach, blending intuition, motivation and also rigorous derivation, to be very effective.



ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT
Cockrell School of Engineering

1616 Guadalupe St. • UTA Building, 7th Floor • Austin, Texas 78701
<http://www.ece.utexas.edu/>

Evdokia has a very clear teaching style. She lectures on the board. She has a very organized and therefore effective style, particularly considering the highly technical/theoretical nature of the material.

There was some interaction with the class, though not too much. The students seemed fairly engaged.

These are the main elements of her teaching that I observed in class, and they all gave me the clear sense that Evdokia is an effective classroom teacher.

Sincerely,

A handwritten signature in blue ink, appearing to read "Constantine Caramanis".

Constantine Caramanis



DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COCKRELL SCHOOL OF ENGINEERING

2501 Speedway • EER Building, 6.804 • Austin, Texas 78712 • (512) 471-6500 • FAX (512) 471-6512

Prof. Constantine Caramanis
 Associate Professor
 Fluor Centennial Teaching Fellowship
 Dept. Of Electrical and Computer Engineering
 The University of Texas at Austin
 E-mail: constantine@utexas.edu
 Phone: (512) 471-9269

May 31, 2018

Teaching Evaluation for Evdokia Nikolova:

On Thursday, December 7th, 2017, I observed Evdokia Nikolova teach the undergraduate class EE360C – Algorithms. This course develops fundamental ideas from algorithm design and analysis, studies computational complexity and computational complexity classes and reductions, and is also one of our curriculum's classes that emphasize proof writing. It is a highly technical class, aimed at developing both techniques and also their rigorous analysis. The course requires using technical material from many areas, and is also a key required course for the Software Engineering and also Data Science technical cores – two of the most populated technical cores.

In the class I attended, there was an in-class quiz. As Evdokia explained to me when we discussed the class and her ideas for overcoming some of the challenges she faces, she uses fairly frequent in-class quizzes as a technique for encouraging engagement and continues focus on the course material. This quiz was to be on a topic related NP-completeness and the subset-sum problem. Accordingly, in the first party of the class, Evdokia went over several example problems relating to the challenge of demonstrating via complexity-preserving reductions, that a problem is NP-complete. She discussed the problem of answering whether a graph has a Advanced problem solving methods; algorithm design principles; complexity analysis; study of the nature, impact, and handling of intractability; study of common algorithmic classes and their applications. Feedback vertex set of k or fewer vertices. Then she similarly led a discussion on approximate subset sum, and on the knapsack problem.

The notion of NP-completeness is difficult to grasp and abstract. Moreover, deriving reductions from one problem to another requires technical mastery combined with careful – sometimes even creative – intuition. Therefore, this is a challenging topic to teach. Evdokia's class was very large, and as undergraduates are often wont to do, many of the students sat as far in the back as the room seating would allow. This sets up a challenging environment, particularly for teaching very technical matter. Evdokia's style, at least for this portion of the class, is to lecture on the board. This allows her to attempt to engage with the students and take suggestions from the audience on how to proceed. While the classroom is quite big, Evdokia's board-style was fairly effective in

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COCKRELL SCHOOL OF ENGINEERING

2501 Speedway • EER Building, 6.804 • Austin, Texas 78712 • (512) 471-6500 • FAX (512) 471-6512

encouraging some number of students to participate, to offer suggestions on how to proceed, and to ask questions as well. Certainly, a large number of students appeared checked out, from my vantage point at the back of the room. And drawing those students in is a central challenge that Evdokia faces. She says that her interactive style, and also use of in-class quizzes on material that is being discussed at least in part during class, is in part of her attempt to address the significant challenge of keeping large numbers of undergraduate students engaged throughout the discussion of highly technical material.

I generally found her teaching style, board work, and broader teaching techniques (like the quizzes) to be effective. Evdokia has a very clear teaching style. She is well prepared and organized. And she appeared to try hard to engage the class.

These are the main elements of her teaching that I observed in class, and they all gave me the clear sense that Evdokia is an effective classroom teacher.

Evdokia and I discussed the overall class, her goals in the class, and her strategies in the class on numerous occasions. Most recently, we discussed my observations in the class I attended.

Sincerely,



Constantine Caramanis

EXHIBIT 68



Evdokia Nikolova <nikolova2009@gmail.com>

Introducing Our New Assistant Dean for Diversity, Equity and Inclusion

Dean Sharon L. Wood, Cockrell School of Engineering <comm@engr.utexas.edu> Wed, Sep 18, 2019 at 10:31 AM
Reply-To: "Cockrell School of Engineering, The University of Texas at Austin" <comm@engr.utexas.edu>
To: nikolova@austin.utexas.edu

[View this email in a web page](#)



Dear Friends and Community Members,

I am pleased to announce that Christine Julien, professor in our Department of Electrical and Computer Engineering and the Anna and Jack Bowen Professor of Engineering, has been appointed as the Cockrell School of Engineering's assistant dean for diversity, equity, and inclusion — a new position established this year.

Christine joined the UT faculty in 2004 and has established a strong reputation among students, staff, and fellow professors as an outstanding collaborator and a passionate educator. She is known throughout the school for her efforts to increase diversity among the faculty and foster an inclusive environment within the electrical and computer engineering department.

I invite you to [read the official announcement](#) to learn more about Christine and our vision for a more diverse, inclusive, and supportive community. Thank you, as always, for your continued support of Texas Engineering.

Sincerely,



Sharon L. Wood
Dean, Cockrell School of Engineering
The University of Texas at Austin

[@SharonLWood](#)

The University of Texas at Austin
Cockrell School of Engineering
301 E. Dean Keeton St.
Austin, Texas 78712

If you would like to unsubscribe from informational emails, please click [here](#)

EXHIBIT 69



Evdokia Nikolova <nikolova2009@gmail.com>

[ece-faculty-a] student course/instructor surveys

Yale N. Patt <patt@ece.utexas.edu>

Mon, Apr 27, 2020 at 4:39 AM

Reply-To: "Yale N. Patt" <patt@ece.utexas.edu>

To: Ramesh Yerraballi <ramesh@mail.utexas.edu>

Cc: "Yu, Edward T" <ety@ece.utexas.edu>, "c.julien@utexas.edu" <c.julien@utexas.edu>, "ece-faculty-a@utlists.utexas.edu" <ece-faculty-a@utlists.utexas.edu>

My colleagues,

As many of you know, I am very much interested in the quality of learning and teaching in our undergraduate program, so I am particularly disappointed that I was not able to attend the faculty meeting last Monday. I did watch the full recording of the meeting. I assume we are going to pick up the subject soon. I do have some comments, which I will try to as briefly as I can mention below.

1. Gustavo's question about "teaching effectiveness." I agree that the current course evaluation does not measure that. I have offered a suggestion more than once that I think would help do it, but it has always been rejected as not doable. Very simply: If course A is a pre-req for course B, then at the end of the semester when the student takes course B, he/she is asked the following questions: Who did you have for course A? How well did the instructor prepare you for course B (on a scale of 1 to 5)? Of course this would not work for courses that are not pre-req for anything further downstream, but it would give us (imho) a lot of insight about the teaching effectiveness in those courses that are pre-reqs for subsequent courses.

2. Electronic student evaluations. I have never used them, so my assumptions about them were flat wrong. I assumed that the instructor was provided a separate snapshot of each student's answers together with the free form statement at the end. Apparently the instructor gets only averages for all the questions with numbers plus a list of all the written comments, with no way for the instructor to examine the written free-form answer in the context of the student's numerical scores. Why would CIS not provide all the information to the instructor? The program that collects the student evaluations can just as easily do it, making it much more valuable to the instructor. I think it is irresponsible on the part of CIS to not provide this information, and this needs to be immediately corrected.

3. Christine's .ppt presentation had a list of bullets titled something like "Principles of Effective Teaching, based on the science of teaching. I won't question those principles but would like to obnoxiously, immodestly offer my "Ten Commandments of Good Teaching," based on my *anecdotal* observations (not on any science of teaching) after decades in the trenches. It is on my website, or if you prefer the url: www.ece.utexas.edu/~patt/Ten.commands. If the university committee feels it is useful, they are welcome to it.

4. The business of the Peer Evaluation in the promotion package, and now to be added or replaced by a "reflections" statement made by the instructor. The idea is to get the Peer Evaluator to not be afraid to offer negative comments that

the Evaluatee can then show by means of a "reflection statement" that he/she understands the problem and is enthusiastically correcting it. A lot to say about this. First, Jon Valvano had it exactly right. He is not going to put anything negative on paper that will end up in the Dean's inbox. That is true for all of us. I am not often accused of being a nice guy, but I find myself bending over backward to be positive in my Peer teaching evaluation and put nothing in writing that could eventually hurt a colleague's promotion package. Years ago I was in charge of managing our Peer Evaluation process and knew of a senior colleague who everyone knew was a disaster as an effective teacher. I decided I would get a "peer" who was willing to do an accurate evaluation. It took me three tries before I found a colleague who I felt would do an accurate job and was willing to do it. The result: Nothing negative in his evaluation. I confronted him. His response was as I expected. He witnessed terrible teaching but came up with lots of reasons why it should not be considered terrible teaching and ended up unwilling to put anything in writing. I wondered about other universities so a few days ago I asked senior colleagues at Michigan and Illinois who have been on university promotion committees: "How often have you seen any negative comment on a teaching evaluation in a promotion package?" Both answered, "Never."

So, the committee is proposing a "reflections" statement from the candidate up for tenure or promotion? Will that answer the question, or will it serve as a creative writing exercise for the candidate in order to allow the university to kid itself into simply feeling good about having somehow taken into account the candidate's teaching effectiveness.

5. The use of outside experts who have no idea of the content of the lecture. I suggest that is a bad idea, given the likelihood that these experts could be easily impressed with the style/veneer of the instructor and have no way of ascertaining the depth of the insights being dealt with in the classroom.

6. Changing the overall question to: "I would recommend this instructor to other students." That is not at all the same as the current question asking how the student feels about the whole learning experience. I agree that the current question does not adequately deal with teaching effectiveness. But students recommend instructors for various reasons. I prefer to not evaluate the professor based on that collection of reasons. I prefer the question: All things considered, rate your learning experience.

I will stop here, since this is probably already too long. I look forward to meaningful dialogue about all of these points and others as well.

Thank you for reading.

Stay safe.
Yale

EXHIBIT 70

Message

From: Sanghavi, Sujay [sanghavi@mail.utexas.edu]
Sent: 4/24/2019 4:49:27 PM
To: Erengil, Jac [jac.erengil@utexas.edu]; Tewfik, Ahmed H [tewfik@austin.utexas.edu]; Nikolova, Evdokia [nikolova@austin.utexas.edu]; Evans, Brian L [bevans@ece.utexas.edu]
Subject: Re: Peer Evaluations Overdue

Hi Jac, Ahmed, Brian,

I am to write a peer evaluation for Eddie (cc-ed). However, she is teaching an advanced grad class. It being at this stage of the semester, the class now has students giving project presentations and answering questions.

So I feel it may be better to do Eddie's evaluation in a future semester, maybe when she is doing the teaching and it is an undergrad class. Thoughts ?

Thanks
Sujay

From: Erengil, Jac
Sent: Wednesday, April 24, 2019 10:40 AM
To: Baccelli, Francois; Dimakis, Georgios-Alex; Shakkottai, Sanjay; Ghosh, Joydeep; Julien, Christine L; Evans, Brian L; John, Lizy K; Neikirk, Dean P; deveciana@utexas.edu; Chen, Ray T; ari54; Pan, David; Nur Touba; Vishwanath, Sriram; Yerraballi, Ramesh; Sanghavi, Sujay; Michael Orshansky; Abraham, Jacob A; Caramanis, Constantine; Khurshid, Sarfraz; Akinwande, Deji; Valvano, Jonathan W; eswartzla; rheath@utexas.edu; Register, Leonard Franklin; Ranjit Gharpurey; nansun@mail.utexas.edu
Cc: Tewfik, Ahmed H
Subject: Peer Evaluations Overdue

Faculty,

If you are receiving this email, your peer evaluation due 4/15/19 has not been submitted.

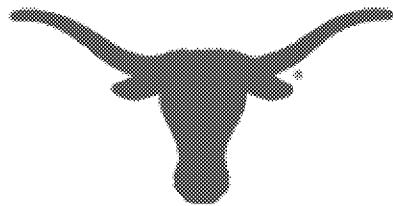
For your reference, below is the link to the 'live' status document on sharepoint (updated by Brian Evans as submissions are received).

Please submit your evaluations to Brian Evans (cc Ahmed Tewfik and Jac Erengil) *as soon as possible*.

Thank you.

<https://sharepoint.engr.utexas.edu/ece/faculty/Document%20Repository/Faculty%20Peer%20Reviews/Forms%20and%20Assignments/Schedule%20of%20Peer%20Evaluations%202018-2019.xlsx>

Best Regards and Hook 'em,



Jac Erengil | Executive Assistant

Jac.ereengil@utexas.edu | 512-471-4540

Department of Electrical and Computer Engineering

2501 Speedway | EER 2.872 (C0803) | Austin Tx 78712

The University of Texas at Austin: What Starts Here Changes the World

EXHIBIT 71

Hi Diana,

Thanks for your response and for looking into this. I absolutely don't mean to push or be disagreeable, and truly want to be a good colleague and work in a friendly nice way with you and everyone in the department. Even sending this email is incredibly difficult and scary for me because I don't want it taken in the wrong way or hurt my relationship with you. From your email I gather that you don't think there is anything that can be done about the 2019 review, but because it seems so "off" from my actual performance, would it be possible or a good idea for me (or you?) to reach out to members of the committee to raise my concerns and ask for reconsideration? Again, raising this is hard because I don't want to be seen as disagreeable or difficult to work with, but I really have concerns that the review is misrepresentative of my work and will hurt my chances of tenure going forward. As you and I talked about when we met, before I raised concerns of discrimination, my research and publication record was not regarded by the department as "reasonable" but instead was described as "a world-class research program," that I was making "foundational contributions," and receiving "high recognition in academia." I was more productive in 2019 than I had even been before, so I can't understand the difference here. Also, with regard to my funding, the department never regarded my funding as "modestly funded" before I raised concerns.

I also want to mention in case that helps, that Texas A&M School of Engineering has a well established procedure for rebutting/revising faculty annual reviews. I would be very happy to work with the Department and/or School of Engineering to translate and develop one here.

Again, I truly don't want to aggravate things, I just want to be treated accurately and fairly. I'm happy to talk with you on the phone or in person more about this if that would be helpful. I very much appreciate your guidance.

Regards,
Eddie

On Tue, Jul 21, 2020 at 12:40 PM Diana Marculescu <dianam@utexas.edu> wrote:

Hi Eddie,

The annual review cannot be updated, unlike the 3rd year review, post-tenure review, and BC statements before they go for a decision to the BC or chair. The annual review is communicated to faculty and sent to CSE after completion but I don't see a way to be modified after the fact. I can send the information you provided to next year's review committee.

I went through your materials and can provide feedback if/when we meet in August. You had mentioned the choice of your mentors - should I go ahead and ask both Constantine and Sanjay to become mentors advise you with next steps in P&T process? This would be useful not just for tenure but also promotion to full professor.

Thanks,
Diana

On 7/16/2020 5:53 PM, Evdokia Nikolova wrote:

Dear Diana,
I wanted to follow up and see what is the process and timeline for updating my annual review based on the facts and language I sent below?
I also wanted to reach out for a follow up meeting on tenure preparation but I will do that later in August as it's crunch time with paper and proposal deadlines for me at the moment.
Thank you,
Evdokia

On Thu, Jun 18, 2020 at 1:54 PM Evdokia Nikolova <nikolova2009@gmail.com> wrote:

Hi Diana,

Case 1:19-cv-00877-RP Document 44-4 Filed 10/22/21 Page 140 of 189

Thank you, I will send a zoom link shortly. Below I wanted to briefly outline alternate language for revising my annual review that I would like to discuss in our upcoming meeting now, in addition to discussing a plan for the coming year to help me succeed with my upcoming tenure evaluation next year.

Thank you again for your time and consideration,
Evdokia

Proposed changes to annual review:

Comments: Dr. Nikolova was on Modified Instructional Duty in Fall 2018; this review is for Spring 2019 activity only. [perhaps there is no need to mention Modified Duty since it has been negatively used against me in the past and if anything, I have shown activity on par or above the expectations for a regular year.]

Dr. Nikolova continues to have an excellent research record, with 3 top journal publications and 2 highly competitive conference publications [for the period Sep.1, 2018-Aug.31 2019], above her annual average of about 3 publications per year for the past 6 years which has always met or exceeded expectations. She leads a very successful research team, one of whose members became an Assistant Professor of Computer Science in Drexel University in Sep. 2019. She also graduated her first PhD student in Aug. 2018. The service to her professional community has been outstanding with two highly visible roles in Spring 2019 as Associate Editor for the top journal Mathematics of Operations Research [of which Constantine Caramanis, a full professor, is also an Associate Editor] and co-chair of the highly competitive conference WINE (one of the top two in the area of Economics & Computation), roles typically given to more senior professors.

She also co-organized a Simons workshop that took place in Berkeley in June 2019, all other organizers being well-known full professors in the top five universities. The service to her department and university has been significantly above average with her raising issues about sex and pregnancy discrimination, which have subsequently triggered transformative changes in the School and University by creating, at the School level, the first ever position of Assistant Dean for Diversity (which that person gets considerable credit for), created in Sep 2019 following Nikolova's discrimination case and the CCAFR committee stating "We strongly recommend that the ECE department work with Vice Provost Gordon to conduct a substantial review of gender equity, diversity, and inclusion in the department."

Dr. Nikolova's funding continues to sustain her excellent research agenda, with three years of funding remaining at the end of the review period, more than double the funding of tenured professor peers in her field at other top institutions and more funding than multiple professors at their time of tenure at UT ECE.

The above is in addition to putting my academic career on the line to try to inspire a positive change for women and underrepresented groups in Engineering and advocating for transparency in the promotion & tenure process.

Original review "Dr. Nikolova has a reasonable publication and teaching record. She maintains a modestly funded research group. During this period, her service to the department was relatively low, but this is also reasonable, given the semester of leave."

On Thu, Jun 18, 2020 at 1:25 PM Diana Marculescu <dianam@utexas.edu> wrote:

Sure, let's do Zoom - it would be great if you could send me a link... Heading off to my 2:30pm....

Thanks,
Diana

On 6/18/2020 1:18 PM, Evdokia Nikolova wrote:

Thanks,
Evdokia

On Thu, Jun 18, 2020 at 1:14 PM Diana Marculescu <dianam@utexas.edu> wrote:

Hi Evdokia,

I have a call at 1:30pm, but we could connect after that at 2pm. Would that work? Or we can find time tomorrow/next week.

Diana

On 6/18/2020 12:04 PM, Evdokia Nikolova wrote:

Hi Diana,

Thanks a lot for your quick availability, and sorry for the slight delay in responding; I saw your email this morning and was in meetings until now. Would say 1:30 pm work for you? I have a 3 pm meeting but can reschedule it if you prefer a later time.

Thank you,
Evdokia

On Wed, Jun 17, 2020 at 5:13 PM Diana Marculescu <dianam@utexas.edu> wrote:

Hi Evdokia,

Sure, how is tomorrow after 1pm?

Thanks,
Diana

On 6/16/2020 3:10 PM, Evdokia Nikolova wrote:

Hi Diana,

I meant to reach out to you separately in wanting to discuss my annual evaluation. Independently I had also wanted to schedule a conversation regarding my upcoming tenure evaluation next year and how to best prepare for that.

What would be a good time in the coming days?

Thank you,
Evdokia

On Tue, Jun 16, 2020 at 3:07 PM Evdokia Nikolova <nikolova2009@gmail.com> wrote:

Thank you, Jac and Diana, I understand.

Regards,
Evdokia

On Tue, Jun 16, 2020 at 1:57 PM Diana Marculescu

<dianam@utexas.edu> wrote:

Hi Evdokia,

Unfortunately we don't have the data in a way that allows us to use first or last name separately. I agree that this is impersonal, but we had to use the school format for storing information. I'll suggest to CSE that they change the format next year.

Thanks,

Diana

On 6/16/2020 1:50 PM, Erengil, Jac wrote:

We did this as a mail-merge template, for all 76 faculty; the template was approved by Chair Marculescu.

I'll make sure to suggest the change for next year's cycle: thank you.

From: Evdokia Nikolova
[<nikolova2009@gmail.com>](mailto:nikolova2009@gmail.com)
Sent: Tuesday, June 16, 2020 1:45 PM
To: Erengil, Jac [<jac.erengil@utexas.edu>](mailto:jac.erengil@utexas.edu)
Subject: Re: Annual Review, assessed by Faculty Evaluation Committee and Department Chair

Jac,

Thank you for the below information. A small request for future: would you please address personal emails to me by my name? Dr. Nikolova, Evdokia, Eddie are all fine. I see it as a standard form of polite communication but also makes me feel respected. Dear X is even better if you are comfortable. I feel small pleasantries like this contribute to an altogether better and more pleasant environment. This is just my perspective and if you are ok with it, I'd greatly appreciate it.

Evdokia

On Tue, Jun 16, 2020 at 10:49 AM Erengil, Jac
<jac.erenkil@utexas.edu> wrote:

This is to notify you of the ECE Faculty Evaluation Committee's assessment of your job performance for the period 2018 - 2019.

Ratings are:

EE-Exceeds Expectations

ME-Meets Expectations

DNME-Does Not Meet Expectations

U-Unsatisfactory

Nikolova, Evdokia

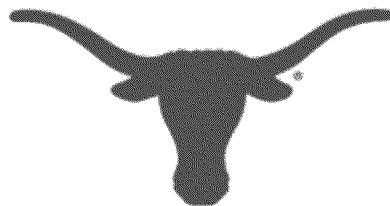
Rating: ME

Comments: Dr. Nikolova was on Modified Instructional Duty in Fall 2018; this review is for Spring 2019 activity only. Dr. Nikolova has a reasonable publication and teaching record. She maintains a modestly funded research group. During this period, her service to the department was relatively low, but this is also reasonable, given the semester of leave.

Department Chair's Rating: ME

The Committee's appraisal has been reviewed by ECE Chair, Dr. Diana Marculescu. If you have any questions or concerns, and/or would like to meet to discuss this annual review, please contact Chair Marculescu at dianam@utexas.edu.

Best Regards and Hook 'em,



Jac Eregil | Assistant Director, Department
Administrative Manager

Jac.erengil@utexas.edu | 512-471-4540

**Department of Electrical and Computer
Engineering**

2501 Speedway | EER 2.872 (C0803) | Austin Tx
78712

The University of Texas at Austin: What Starts Here
Changes the World

--
Evdokia Nikolova
<http://users.ece.utexas.edu/~nikolova/>

EXHIBIT 72

Message

From: Christine Julien [c.julien@utexas.edu]
on behalf of Christine Julien <c.julien@utexas.edu> [c.julien@utexas.edu]
Sent: 5/21/2020 2:00:10 AM
To: Marculescu, Diana [dianam@utexas.edu]
Subject: Re: [ECE Faculty Review] Ratings Spreadsheet

Each faculty member has two independent reviews and then the entire committee reviewed and signed off on the entire list. We had longer conversations in a few cases.

Christine

On Wed, May 20, 2020 at 8:56 PM Marculescu, Diana <dianam@utexas.edu> wrote:

Hi Christine,

Thank you! Was every faculty assigned to one committee member it was it a subset (if so, how large)? I'd like to use the same criteria for reviewing the committee members themselves.

Thanks a lot,
Diana

DIANA MARCULESCU, Department Chair and Professor of Electrical and Computer Engineering
The University of Texas at Austin | [512-471-6179](tel:512-471-6179) | @dianamarculescu | [@UTexasECE](https://www.utexas.edu/ece/faculty/dianamarculescu)

On May 19, 2020, at 8:55 AM, Christine Julien <c.julien@utexas.edu> wrote:

Diana--

Attached is the updated spreadsheet containing the additional three ratings from the committee.

Thanks,
Christine

CHRISTINE JULIEN

Annis & Jack Bowen Professor in Engineering, Electrical and Computer Engineering
Assistant Dean for Diversity, Equity, and Inclusion, Cockrell School of Engineering
The University of Texas at Austin | 512.232.5671 | (pronouns: she/her/hers)

Please note that I may work flexibly or travel to timezones outside of Austin. While it suits me to email now, I do not expect a response or action from you outside of your own working hours.

On Wed, May 13, 2020 at 12:21 PM Christine Julien <c.julien@utexas.edu> wrote:
Diana (cc Jac + committee)--

Attached is the spreadsheet containing the ratings for the full faculty. There are four missing reviews; please advise us on how we should handle them.

1. Evdokia Nikolova -- she was on MID for F18, but there is no FAR for review for Sp19.
2. Andrea Thomaz -- the committee believes she was on leave and therefore a review should not be done. In any case, no FAR was submitted.
3. Mohit Tiwari -- no FAR was submitted. The committee wondered if there was a relationship between this and his promotion?
4. Ramesh Yerraballi -- no FAR was submitted.

Thanks!
Christine

CHRISTINE JULIEN

Annis & Jack Bowen Professor in Engineering, Electrical and Computer Engineering
Assistant Dean for Diversity, Equity, and Inclusion, Cockrell School of Engineering
The University of Texas at Austin | 512.232.5671 | (pronouns: she/her/hers)

Please note that I may work flexibly or travel to timezones outside of Austin. While it suits me to email now, I do not expect a response or action from you outside of your own working hours.

<18-19 Annual Activity Assignments TO TRANSMIT.xlsx>

--
CHRISTINE JULIEN

Annis & Jack Bowen Professor in Engineering, Electrical and Computer Engineering
Assistant Dean for Diversity, Equity, and Inclusion, Cockrell School of Engineering
The University of Texas at Austin
(pronouns: she/her/hers)

Please note that I may work flexibly or travel to timezones outside of Austin. While it suits me to email now, I do not expect a response or action from you outside of your own working hours.

EXHIBIT 73

[Close Window](#)[Print FAR](#)

Faculty Activity Report for Evdokia Nikolova - 2018-19 - Submitted

General Information

Personal Website

<http://users.ece.utexas.edu/~nikolova/>

Biography

Evdokia Nikolova is an Assistant Professor in the Department of Electrical and Computer Engineering at the University of Texas at Austin, where she is a member of the Wireless Networking & Communications Group. Previously she was an Assistant Professor in the Department of Computer Science and Engineering at Texas A&M University. She graduated with a BA in Applied Mathematics with Economics from Harvard University, MS in Mathematics from Cambridge University, U.K. and Ph.D. in Computer Science from MIT.

Nikolova's research aims to improve the design and efficiency of complex systems, by integrating stochastic, dynamic and economic analysis. Her recent work examines how human risk aversion transforms traditional computational models and solutions. One of her algorithms has been adapted in the MIT CarTel project for traffic-aware routing. She currently focuses on developing algorithms for risk mitigation in networks, with applications to critical infrastructure: transportation, energy and healthcare. She is a recipient of an NSF CAREER award and a Google Faculty Research Award. Her research group has been recognized with a best student paper award and a best paper award runner-up.

Nikolova is a leader in her research community. She is an editor of the prestigious professional journal *Mathematics of Operations Research* and was the 2019 program co-chair for the Conference on Web and Internet Economics. Her goal is to build interdisciplinary bridges to lead her research community to solve problems in a diverse range of applications. To this end, she has co-organized five workshops and one semester-long research program on *Real-time Decision Making* at the renowned Simons Institute for the Theory of Computing in 2018. This program brought together theoretical computer scientists and engineers with domain experts from transportation, energy and the natural sciences, identified and helped solve problems of global societal importance.

Nikolova's passion is to make practical impact that improves the daily lives of people around the globe. She is active in improving the diversity in STEM (Science, Technology, Engineering & Mathematics) through outreach activities (giving lectures, mentoring and writing about research accessible to a broad audience) and through innovative community building such as organizing a math-dance camp.

Degrees

Source	Year	Degree	Equivalency	Discipline	Institution
Central	2009	PhD	Doctoral	Electrical/Computer Engineering	Massachusetts Institute of Technology
Central	2003	MS	Masters	Mathematics, General	University of Cambridge
Central	2002	BA	Bachelors	Applied Mathematics, Other	Harvard University

Central 2002 MS Masters Computer Science Harvard University

Teaching

Teaching Comments or Statement

No Teaching Comments or Statement information on record for this Faculty Activity Report.

Scheduled Teaching

Source	Semester	Course Abbreviation	Course Title	Course Level	Unique Nbr	Enrollment	Credit Hours	CIS Course Rating	CIS Instructor Rating
Central	Fall 2018	CS 395	Conference Course	Graduate	51850	1	3	N/A	N/A
Central	Fall 2018	E E 397C	Research Problems	Graduate	17100	1	3	N/A	N/A
Central	Fall 2018	E E 697C	Research Problems	Graduate	17105	1	6	N/A	N/A
Central	Spring 2019	E E 381V	Game Theory	Graduate	16724	2	3	N/A	N/A
Central	Spring 2019	E E 381V	Game Theory	Graduate	16735	30	3	3.5	3.8
Central	Spring 2019	E E 397C	Research Problems	Graduate	16935	1	3	N/A	N/A
Central	Spring 2019	E E 697C	Research Problems	Graduate	16940	1	6	N/A	N/A
Central	Spring 2019	E E 697C	Research Problems	Graduate	16940	1	6	N/A	N/A
Central	Spring 2019	E E 999W	Dissertation	Graduate	17015	1	9	N/A	N/A
Central	Summer 2019	E E W397C	Research Problems	Graduate	76125	1	3	N/A	N/A
Central	Summer 2019	E E W399W	Dissertation	Graduate	76165	1	3	N/A	N/A

Graduate Student Supervision

Source	Begin Semester	End Semester	Committee Role	Committee Level	Student Name	Degree Program
Central	Fall 2017	Fall 2018	Member	Doctoral	Narayana Prasad, M.	Operations Research and Industrial Engineering
Central	Spring 2019		Co-Supervisor	Doctoral	Basu, Soumya	Electrical and Computer Engineering
Central	Spring 2019		Member	Doctoral	Converse, Hayes Elliott	Electrical and Computer Engineering
Central	Spring 2019		Supervisor	Doctoral	Khodabakhsh, Ali Orestis	Electrical and Computer Engineering

Faculty	Fall 2017	Fall 2018	Supervisor	Master's	Papadopoulos	Computer Science
Faculty	Fall 2017	Fall 2019	Supervisor	Master's	Isidoros Giotis	Electrical and Computer Engineering
Faculty	Fall 2018	Spring 2019	Supervisor	Master's	Eftychia Vakaliou	Electrical and Computer Engineering
Faculty	Fall 2019		Supervisor	Doctoral	Yutong Wu	Operations Research and Industrial Engineering

Graduate or Undergraduate Student Advising

Source	Begin Date	End Date	Description
Faculty	2018	2019	John Sigmon - undergraduate advising

Graduate or Undergraduate Research

No Graduate or Undergraduate Student Research information on record for this Faculty Activity Report.

Scholarly & Creative Works

Current Scholarly, Creative Works, or Research Interests

Research interests: Algorithms and game theory with applications to energy, transportation, healthcare

PI Evdokia Nikolova's research goal is to improve the design and efficiency of complex systems by integrating stochastic, dynamic and economic analysis. Her work examines how human risk aversion transforms traditional computational models and solutions. Her current research is developing algorithms for risk mitigation in networks with applications in critical infrastructure: energy, transportation and healthcare. One of her algorithms has been adapted in the MIT CarTel project for risk-aware traffic routing. She is a recipient of multiple awards, including a Google Research Faculty Award, four NSF grants, and an NSF CAREER award. Her research group has been recognized with a best student paper award and a best paper award runner-up.

PI Nikolova is a leader in her research community. She is an editor of the prestigious professional journal *Mathematics of Operations Research* and was the 2019 program co-chair for the Conference on Web and Internet Economics. Her goal is to build interdisciplinary bridges to lead her research community to solve problems in a diverse range of applications. To this end, she has co-organized five workshops and one semester-long research program on *Real-time Decision Making* at the renowned Simons Institute for the Theory of Computing in 2018. This program brought together theoretical computer scientists and engineers with domain experts from transportation, energy and the natural sciences, identified and helped solve problems of global societal importance.

Separate by section

Publications and Creative Works

Source Year	Type	Section	Title or Description	Peer Reviewed
Faculty 2020 Publication	REFEREED CONFERENCE PROCEEDINGS	J. Horn, A. Khodabakhsh, E. Nikolova, E. Pountourakis, Y. Wu. The Long-term Cost of Energy Generation. In Proceedings of ACM International Conference on Future Energy Systems (e-Energy), Melbourne, Australia, June 22-26, 2020.		Yes
Faculty 2019 Creative Work	REFEREED ARCHIVAL JOURNALS	R. Shafipour, A. Khodabakhsh, G. Mateos, and E. Nikolova, A directed graph Fourier transform with spread frequency components, IEEE Transactions on Signal Processing, Volume 67, Issue 4, pp. 946 - 960, Feb. 15, 2019 Adi Botea, Akihiro Kishimoto, Evdokia Nikolova, Stefano Braghin,		Yes

Faculty 2019	Creative Work	REFEREED ARCHIVAL JOURNALS	Michele Berlingero, Elizabeth Daly. Computing Multi-Modal Journey Plans under Uncertainty, Journal of Artificial Intelligence Research (JAIR), vol. 65, pp. 633-674, 2019	Yes
Faculty 2019	Creative Work	REFEREED CONFERENCE PROCEEDINGS	A. Khodabakhsh, J. Horn, E. Nikolova, E. Pountourakis. Prosumer Pricing, Incentives and Fairness, in Proceedings of the ACM International Conference on Future Energy Systems (e-Energy), 2019	Yes
Faculty 2018	Creative Work	REFEREED ARCHIVAL JOURNALS	T. Lianeas, E. Nikolova, N. E. Stier-Moses. Risk-averse selfish routing, Mathematics of Operations Research, vol. 44(1), pp. 38-57, 2018	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	R. Shafipour, A. Khodabakhsh, G. Mateos, and E. Nikolova. Digraph Fourier Transform via Spectral Dispersion Minimization, in Proceedings of IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2018), Calgary, Alberta, Canada, April 15-20, 2018.	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	A. Khodabakhsh, G. Yang, S. Basu, E. Nikolova, M. C. Caramanis, T. Lianeas, M. Pountourakis. A Submodular Approach for Electricity Distribution Network Reconfiguration, in 51st Hawaii International Conference on System Sciences (HICSS), Hawaii, USA, January 3-6, 2018.	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	D. Applegate, A. Archer, D. S. Johnson, E. Nikolova, M. Thorup, G. Yang. Wireless Coverage Prediction via Parametric Shortest Paths, in Proceedings of the Nineteenth International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc 2018), Los Angeles, USA, June 26-29, 2018.	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	J. Correa, C. Guzman, T. Lianeas, E. Nikolova, M. Schroeder. Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators, in Proceedings of the Nineteenth ACM Conference on Economics and Computation (EC 2018), Ithaca, NY, June 19-21, 2018.	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	R. Cole, T. Lianeas, E. Nikolova. When Does Diversity of Agent Preferences Improve Outcomes in Selfish Routing? in Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI 2018), Stockholm, Sweden, July 13-19, 2018.	Yes
Faculty 2018	Creative Work	REFEREED CONFERENCE PROCEEDINGS	E. Nikolova, G. Yang and E. Pountourakis. Optimal Mechanism Design with Risk-loving Agents, in Proceedings of the 14th Conference on Web and Internet Economics (WINE), 2018	Yes

Presentations and Lectures

Source	Presentation Date	End Date	Organization/Institution	Title/Description
Faculty 2017			12th Athens Colloquium on Algorithms and Complexity (ACAC'17), Athens, Greece	Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators, Keynote Talk at the 12th Athens Colloquium on Algorithms and Complexity (ACAC'17)
Faculty 2017			HEC Montreal	Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators, Keynote Talk at the Ninth Workshop on Dynamic Games in Management Science
Faculty 2017			Microsoft Research - New England	Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators. Video recording: https://channel9.msdn.com/Shows/Microsoft-Research/Network-Pricing-How-to-Induce-Optimal-Flows-Under-Strategic-Link-

			Operators
Faculty 2018	Simons Institute for the Theory of Computing		A Brief Introduction to Algorithms, Game Theory and Risk-averse Decision Making. YouTube video recording: https://www.youtube.com/watch?v=_BOrAoD7FWs&feature=youtu.be
Faculty 2018	Simons Institute for the Theory of Computing		Risk-averse Selfish Routing. YouTube video recording: https://www.youtube.com/watch?v=0JdIjgTS9ao&feature=youtu.be
Faculty 2018	Simons Institute for the Theory of Computing		When Does Diversity of Agent Preferences Improve Outcomes in Selfish Routing. YouTube Video recording: https://youtu.be/OjxdRrg9nQg
Faculty 2019	Workshop on Algorithms for Learning and Economics		Algorithms and mechanisms for electricity distribution networks
Faculty 2019	Simons Institute for the Theory of Computing		Algorithms and mechanisms for electricity distribution networks
Faculty 2019	University of Texas at Dallas		Effects of risk-aversion and diversity of user preferences on selfish routing
Faculty 2019	Texas A&M University		Effects of risk-aversion and diversity of user preferences on selfish routing. Computer Engineering and Systems Seminar Series
Faculty 2019	Conference on Information Theory and Applications (ITA)		Network Pricing: How to Induce Optimal Flows Under Strategic Link Operators
Faculty 2019	Workshop on Twenty Years of the Price of Anarchy		Risk-aversion and diversity in network routing
Faculty 2019	Georgia Institute of Technology		Risk-aversion and diversity in network routing
Faculty 2019	University of Colorado-Boulder		Risk-aversion and diversity in network routing
Faculty 2019	Texas A&M University		Risk-aversion and diversity in network routing. Department of Computer Science & Engineering

Intellectual Property

No Intellectual Property information on record for this Faculty Activity Report.

Research

Sponsored Research

Source	Begin Date	End Date	Sponsor Name	Project Title	Role	Total Award Amount	Project FY Expenditures	Investigator FY Expenditures	Percent Contribution	OSP Nbr
Central	2003-01-01	2022-12-31	Qualcomm Inc	Wireless Networking & Communications Group (Wncg)	Co-PI	\$11,430,633	\$1,302,957	\$63,245	5.26%	200201535
Central	2014-05-15	2020-04-30	National Science Foundation	Career: Algorithms For Risk Mitigation In Networks	PI	\$561,540	\$163,594	\$163,594	100.00%	201400841

			Aitf: Collaborative Research: Algorithms And Mechanisms For The Distribution Grid	PI	\$479,985	\$158,321	\$158,321	100.00%	201700030
Central Faculty	2017-10-01	2021-09-30	National Science Foundation	Coupon Incentive-based Risk Aware Demand Response in Smart Grid	Co-PI	\$667,000		50.00%	

Other Research

Source	Begin Date	End Date	Sponsor Name	Project Title/Description	Total Award Amount	Percent Contribution
Faculty	2020-09-01	2021-08-31	UT Austin: Good Systems Initiative	Optimize EMS Responses during Extreme Events	\$98,000	50.00%

Pending Research Proposals

Source	Submission Date	Estimated Begin Date	Estimated End Date	Sponsor Name	Project Title/Description	Total Funding Requested	Percent Contribution	Role	OSP Nbr	Comments
Faculty	2020-05-07	2020-09-01	2022-08-31	AXA Fund	Optimize EMS Research Deployment Fund during Pandemics	\$250,000	100.00%	PI	202001399	250,000 funding amount is in EURO

Service & Activities

Source	Begin Date	End Date	Scope	Description
Faculty	2017	2018	International	Program co-organizer, "Real-time Decision Making" research program, Simons Institute for the Theory of Computing. Jan. 9 – May 11, 2018. Website: https://simons.berkeley.edu/programs/realtimetime2018
Faculty	2018	2018	International	Program Committee member: Nineteenth ACM Conference on Economics and Computation (ACM EC'18)
Faculty	2018	2018	International	Workshop co-organizer. Real-Time Decision Making Boot Camp, Simons Institute for the Theory of Computing. Jan. 22 – Jan. 26, 2018. Website: https://simons.berkeley.edu/workshops/realtimetime2018-boot-camp
Faculty	2018	2018	International	Workshop co-organizer: Mathematical and Computational Challenges in Real-Time Decision Making, Simons Institute for the Theory of Computing. Apr. 30 – May 4, 2018. Website: https://simons.berkeley.edu/workshops/realtimetime2018-3
				Program co-chair for WINE 2019: The 15th Conference on Web and Internet Economics.

Faculty 2019 2019 International Webpage: <https://wine2019.cs.columbia.edu/index.html>

Faculty 2019 Workshop co-organizer, "Real-Time Decision Making Reunion", Simons Institute for the
2019 International Theory of Computing, Jun. 3 – Jun. 5, 2019.
<https://simons.berkeley.edu/workshops/realtime2018-reunion>

Faculty 2019 2020 Department DICE graduate admissions committee

Faculty 2019-01-01 International Associate Editor, Mathematics of Operations Research

Honors & Awards

No Honors and Awards information on record for this Faculty Activity Report.

Supplemental Documents

No Documents information on record for this Faculty Activity Report.

General Comments

No General Comments information on record for this Faculty Activity Report.

EXHIBIT 75

SUMMARY OF ACTIVITIES FOR

September 1, 2018 – August 31, 2019

A. Research:

1. Awards and Honors

ACM SIGSOFT Distinguished Paper Award (FSE 2019)

Best Reviewer Award, International Conference on Software Engineering (ICSE 2019)

“Verifying Algorand”, gift from RuntimeVerification, \$15k

“Intelligent Test Execution”, gift from Huawei, \$70k

Research Experiences for Undergraduate (REU) Supplement, PI: Milos Gligoric, NSF Faculty Early Career Development Program (CAREER), \$16k

2. Invited Addresses and Colloquia

09/18 Techniques for High-performance Regression Testing, at Futurewei Academia Test Forum, Dallas, TX, USA

12/18 Techniques for High-performance Regression Testing, at Huawei, Urbana-Champaign, IL, USA

3. Publications

(a) Journals and books

Indicate published, accepted for publication, revised or submitted and under review.

(b) Refereed Conference Proceedings

Indicate published or accepted for publication.

Pengyu Nie, Rishabh Rai, Junyi Jessy Li, Sarfraz Khurshid, Raymond J. Mooney and **Milos Gligoric**
A Framework for Writing Trigger-Action Todo Comments in Executable Format
Symposium on the Foundations of Software Engineering
(FSE 2019), to appear, Tallinn, Estonia, August 2019.
(This paper **won an ACM SIGSOFT Distinguished Paper Award.**)

Chenguang Zhu, Owolabi Legunsen, August Shi and **Milos Gligoric**
A Framework for Checking Regression Test Selection Tools
International Conference on Software Engineering
(ICSE 2019), 430-441, Montreal, Canada, May 2019.

Ben Buhse, Thomas Wei, Zhiqiang Zang, Aleksandar Milicevic and **Milos Gligoric**

VeDebug: Regression Debugging Tool for Java

International Conference on Software Engineering, Demo Papers
(ICSE Demo 2019), 15-18, Montreal, Canada, May 2019.

Ben Fu, Sasa Misailovic and **Milos Gligoric**

Resurgence of Regression Test Selection for C++

International Conference on Software Testing, Verification and Validation
(ICST 2019), 323-334, Xi'an, China, April 2019.

Nima Dini, Cagdas Yelen, **Milos Gligoric** and Sarfraz Khurshid

Extension-Aware Automated Testing Based on Imperative Predicates

International Conference on Software Testing, Verification and Validation
(ICST 2019), 25-36, Xi'an, China, April 2019.

Wenxi Wang, Kaiyuan Wang, **Milos Gligoric** and Sarfraz Khurshid

Incremental Analysis of Evolving Alloy Models

International Conference on Tools and Algorithms for the Construction and Analysis of Systems
(TACAS 2019), 174-191, Prague, Czechia, April 2019.

Jongwook Kim, Don Batory and **Milos Gligoric**

Code Transformation Issues in Move-Instance-Method Refactorings

International Workshop on Refactoring
(IWoR 2019), Montreal, Canada, May 2019.

Karl Palmskog, **Milos Gligoric**, Lucas Pena and Grigore Rosu

Verifying Finality for Blockchain Systems

International Workshop on Coq for Programming Languages
(CoqPL 2019), Cascais/Lisbon, Portugal, January 2019.

(c) Conference Presentations Without Proceedings of Full Papers

3. Student Advising

(a) Completed PhD Theses

Names of students and program (e.g. ECE, CS, Physics, etc.)

Ahmet Celik, CS

(b) Current Graduate Advisees and Post-docs

Post-docs

Full-time PhD:

- Jaeseong Lee (PhD)
- Pengyu Nie (PhD)
- Zhiqiang Zang (PhD)

Part-time PhD:

MS Thesis or Report:

4. Current Research Projects and Grants

Title, agency, PI, role, amount, duration

Also list active research projects that are not funded (e.g. carried out by PhD level students)

PI

SHF: Medium: Collaborative Research: Testing in the Era of Approximation

National Science Foundation

\$700,000

08/01/2017 - 07/31/2017

PI

CAREER: Advancing Regression Testing: Theory and Practice

National Science Foundation

\$502,947

06/01/2017 - 05/31/2022

5. Proposal Submissions

Title, agency, PI, role, amount, duration

PI

SHF:Medium: Code and Comment Co-evolution Through Integrated Program and Natural Language Analysis

National Science Foundation

\$1,200,000

07/01/2020

06/30/2024

co-PI

Exascale Predictive Simulation of Inductively Coupled Plasma Torches

DOE NNSA

The University of Texas at Austin

\$16,500,000

04/01/2020

03/31/2025

co-PI

Co-evolution of Code and Comments

Google

The University of Texas at Austin

\$55,600

08/01/2020

07/31/2021

B. Teaching and teaching scores

6. Special Projects, Lab and Course Developments, etc.

Developing a new class in Fall 2019 “Engineering Dynamic Program Analysis”; this class is offered to both undergraduate and graduate students. The class covers topics on static and dynamic program analysis, as well as compilers.

In Spring 2019, we have introduced EE312H, an honors version of EE312; this change required going into some materials in more depth.

C. Service Activities

7. University Service

Junior Faculty Hiring 2019/20
ECE seminars committee 2019/20

8. Technical Society Service

PC member, Symposium on Software Testing and Analysis
Organization Chair, Symposium on Software Testing and Analysis
PC member, Conference on Software Engineering
Web co-chair, Conference on Software Engineering
PC member, Conference on Software Testing, Verification and Validation
PC member, Java PathFinder Workshop
PC member, Conference on Computer Aided Verification

D. Other Items of Interest

E. Plans for the Coming Year

Prepare a proposal for NSF; I plan to target NSF:Small core program. The topic will be Proof Engineering, which is my recent interest to bring software engineering to proof engineers.

I plan to also apply for several industrial awards, e.g., Citadel and Salesforce.

Regarding the course, I plan to revise some materials for EE312H and bring more structured overview of materials in a form of a workbook or similar style.

EXHIBIT 76

SUMMARY OF ACTIVITIES FOR

Nov 2018 – Nov 2019

A. Research:

1. Awards and Honors

- Best student paper award at DNA'25 conference
- Best paper award at CMSB conference
- Another paper in top 3 in CMSB
- Invited to be on TPC of ICCAD [declined]

2. Invited Addresses and Colloquia

3. Publications

(a) Journals and books

Indicate published, accepted for publication, revised or submitted and under review.

- [published] Keenan Breik, Chris Thachuk, Marijn Heule, David Soloveichik, "Computing properties of stable configurations of thermodynamic binding networks". *Theoretical Computer* 785: 17-29 (2019)
- [published] Boya Wang, Chris Thachuk, Andrew D Ellington, Erik Winfree, David Soloveichik, "Effective design principles for leakless strand displacement systems", *Proceedings of the National Academy of Sciences*, USA 115 (52): E12182-E12191 (2018).
- [accepted] Cameron Chalk, Niels Kornerup, Wyatt Reeves, David Soloveichik, "Composable Rate-Independent Computation in Continuous Chemical Reaction Networks", IEEE/ACM Transactions on Computational Biology and Bioinformatics (special issue)
- [accepted] Keenan Breik, Cameron Chalk, David Doty, David Haley, David Soloveichik, "Programming Substrate-Independent Kinetic Barriers with Thermodynamic Binding Networks", IEEE/ACM Transactions on Computational Biology and Bioinformatics (special issue)

(b) Refereed Conference Proceedings

Indicate published or accepted for publication.

- [published] Boya Wang, Cameron Chalk, David Soloveichik, "SIMD||DNA: Single Instruction, Multiple Data Computation with DNA Strand Displacement Cascades." *Proceedings of DNA Computing and Molecular Programming* 25 (DNA25) (2019).

(c) Conference Presentations Without Proceedings of Full Papers

3. Student Advising

(a) Completed PhD Theses

Names of students and program (e.g. ECE, CS, Physics, etc.)

(b) Current Graduate Advisees and Post-docs

Post-docs

Full-time PhD: Boya Wang, Keenan Breik, Cameron Chalk.

Part-time PhD: Andy Cardona (Biochemistry student doing rotation in my group)

MS Thesis or Report:

4. Current Research Projects and Grants

Title, agency, PI, role, amount, duration

Also list active research projects that are not funded (e.g. carried out by PhD level students)

-NSF-CCF: "AF:Small:Collaborative Research:Kinetics and Thermodynamics of Chemical Computation",
NSF, PIs: David Doty, David Soloveichik. Individual allocation: \$250,000 [3 years]

-NSF-CCF: "CAREER: Robust molecular computation: error-correcting reaction networks and leakless DNA circuits",
NSF, PI David Soloveichik, \$460,786 [5 years]

-DARPA: "Native DNA-based Data Storage and Computing." PI: Olgica Milenkovic, co-PIs: Huimin Zhao, Alvaro Hernandez. Subcontractors: Mark Riedel, David Soloveichik. Individual allocation: \$400,000 [3 years].

-NSF-CCF: "FET: Medium: Collaborative Research: Engineerable molecular computing: flying like an airplane, not like a bird" PIs: David Doty, David Soloveichik. Individual allocation: \$600,000 [4 years].

5. Proposal Submissions

Title, agency, PI, role, amount, duration

-[not funded] Welch foundation: "Programming functional macromolecules via an abstraction of configurational entropy". PI: David Soloveichik. Individual allocation: \$195,000 [3 years]

-[pending] Sloan Foundation Fellowship, \$75,000

B. Teaching and teaching scores

[Fall 2018] EE360C: Algorithms:

morning section: 73 students, instructor score: 4.3

evening section: 98 students, instructor score: 4.4

6. Special Projects, Lab and Course Developments, etc.

C. Service Activities

- reviewer for *Molecules* (journal), ITCS (conference), Natural Computing (Journal), Journal of Royal Society Interface (journal), PODC (conference), ACS Synthetic Biology (journal)
- Program Committee for DNA25
- Steering Committee for DNA conference
- NSF Expeditions meeting (Dec 2018)

7. University Service

- bioECE graduate admissions (with Haris Vikalo)
- Graduate Advisor for bioECE track
- PhD defense committee for 1 ECE student
- Candidacy committee for 2 ECE students

8. Technical Society Service

D. Other Items of Interest

E. Plans for the Coming Year

- Increase group size
- Graduate 2 students
- Increase collaboration with other UT faculty members

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: 09/17/2014

RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS

Name: Neal A. Hall EID: nah78 Present Rank: Assistant Professor

Years of Academic Service (*Include AY 2014-15 in each count*):

At UT Austin since: 01/16/2009 In Present Rank: 6.50 In Probationary Status (TT only): 6
(month/day/year) (# of years) (# of full years or N/A)

Primary Department: Electrical and Computer Engineering College/School: Cockrell School of Engineering

Joint Department: - College/School: -

Other Department(s): -

Recommendation actions¹:

By Budget Council/Executive Committee: Promote

Vote² for promotion 30; Against 1; Abstain 2; Absent 2; Ineligible to vote 0

By Department Chair: Promote

Vote for promotion _____; Against _____; Abstain _____; Absent _____

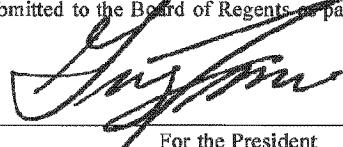
By College/School Advisory Committee: Promote

Vote for promotion 7; Against 0; Abstain 0; Absent 0

By Dean: Promote

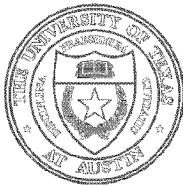
Promote to Associate Professor
Administrative Action: _____

Date Action Effective: September 1, 2015
(To be submitted to the Board of Regents as part of the annual budget.)

By:  Date: December 17, 2014
For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.

²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of budget council/executive committee members ineligible to vote due to rank should also be recorded. Enter zero where it would otherwise be blank.



THE UNIVERSITY OF TEXAS AT AUSTIN
COCKRELL SCHOOL OF ENGINEERING

Office of the Dean • 301 E. Dean Keeton Street, C 2100 • Austin, Texas 78712-2100

Dean's Assessment

Neal A. Hall

Department of Electrical and Computer Engineering

Neal Hall received his BS in Mechanical Engineering from the University of Texas at Austin in 1999, and his MS and PhD degrees in Mechanical Engineering from the Georgia Institute of Technology in 2002 and 2004, respectively. Dr. Hall was a post-doctoral scholar at Sandia National Laboratories for two years. In 2007, he founded Silicon Audio¹, Inc., and he continues to serve as its CTO. Dr. Hall started his tenure-track appointment as assistant professor in the Department of Electrical and Computer Engineering at the University of Texas in Austin in January 2009. If successfully promoted to associate professor, Dr. Hall will have been in the rank of assistant professor for six and a half years.

Eleven external references were submitted as part of the promotion dossier, five chosen by the candidate and six by the department's budget council. No invitations to be a reviewer were declined or ignored. Ten letters² were from professors at universities in the US, including Stanford, Michigan, USC, Berkeley, Carnegie Mellon, and Penn State. One external reviewer is from industry.

Teaching

Dr. Hall teaches courses in electrical engineering. Since joining UT, he has taught a total of ten classes (three different courses): two undergraduate courses, EE 313, *Linear Systems and Signals* (four times) and EE 363N/ME 279N, *Engineering Acoustics* (two times); and one graduate course, EE 384N, *Electromechanical Transducers* (four times). Overall, the enrollment has varied between 20 and 70 students in his undergraduate classes and between 8 and 19 students in his graduate classes. Dr. Hall's average instructor ratings are consistently high in both undergraduate courses (4.37) and graduate courses (4.45), which are well above both departmental and Cockrell School averages. The course ratings are also consistently high in undergraduate courses (4.1) and graduate courses (4.25).

Dr. Hall has the highest teaching evaluations within the ECE department for EE 313, a core undergraduate course. His scores in EE 363N/ME 279N (Fall 2012) were uncharacteristically low (3.7/3.4). Dr. Hall indicated that he changed the nature of the design projects in EE 363N that semester, and based on student feedback, he will return to the original curriculum in subsequent offerings of the course.

In the last two years, full professors have conducted peer reviews of EE 313 three times. All evaluations are very positive and indicate the teaching talent of Dr. Hall. Dr. Hall's excellent teaching record was recognized with the University of Texas System Regents' Outstanding Teaching Award in 2014.

Research

Dr. Hall's research is in the area of transduction. He focuses on translating acoustic and mechanical vibrations to electronic signals. His work lies at the interface of acoustics, transducers, and silicon micromachining. His research group has made substantial contribution to these areas including the inventions of different configurations for micro-electro-mechanical-systems (MEMS) transducers; extensive performance improvements to acoustic

¹ Silicon Audio (<http://www.siaudio.com/>) is a high-tech startup focused on developing high-performance, miniature microphones. Silicon Audio secured a strategic investment deal in 2012 and is now entirely funded by private capital.

² Dr. Ronald Miles (SUNY Binghamton) is not an arm's length reviewer. Dr. Miles collaborated with Dr. Hall's PhD advisor at Georgia Tech (Dr. Levent Degertekin), and is a co-author on two of Dr. Hall's journal papers.

transducers to achieve record breaking levels of sensitivity and noise reduction with small package volume and power consumption; and to the analysis, modeling, and fabrication technologies for these types of MEMS transducers. Dr. Hall is acknowledged for establishing the necessary infrastructure at the Pickle Research Campus (PRC) to meet the needs for state-of-the-art silicon MEMS fabrication, including a new facility for deposition and patterning piezoelectric materials onto MEMS structures.

While in rank, Dr. Hall has published 18 refereed archival journal publications (including two in press) (30 career total). Sixteen of these papers are based on his work at UT and two document his graduate work at Georgia Tech. These papers are in high-impact journals, such as *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control; Applied Physics Letters; Journal of Microelectromechanical Systems; Advanced Materials; and Journal of the Acoustical Society of America*. Dr. Hall has also published six refereed conference proceedings in rank (14 career total) and one book chapter.

Dr. Hall holds six patents based on work at Georgia Tech and Silicon Audio. He has also filed three patent applications (two based on work at UT) and one provisional patent application (based on work at UT).

The time required to setup an active materials processing bay for deposition and processing of piezoelectric materials in the cleanroom at the Microelectronics Research Center was noted by the department chair as one of the reasons underlying Dr. Hall's modest production of journal papers during his first few years at UT Austin. However, with the recent increase in productivity, Dr. Hall compares favorably with his peers in other highly-ranked departments of electrical engineering.

During his time at UT, Dr. Hall has received nine research grants. With the exception of one research gift from Silicon Audio, all the grants were federally funded. Four of the awards are SBIR grants (from NSF, NIH, and DOE) to Silicon Audio, with subawards to UT Austin. Dr. Hall serves as PI on the four, federally-funded grants to UT. Among these, Dr. Hall was awarded a DARPA Young Faculty Award for work in the area of silicon micromachined airborne ultrasonic transducers in 2012, and an Office of Naval Research (ONR) Young Investigator Award for work in the area of underwater micro-electromechanical-system (MEMS) transducers in 2014. Dr. Hall's total funding is nearly \$3.4 million, and his portion is more than \$1.8 million.

All of the external references emphasized the significance of Dr. Hall's research, acknowledged his contributions to the field, and highlighted the innovative nature of his work. The letters present a consistent recommendation for promotion.

Dr. Olav Solgaard (Stanford) writes, "Of his many contributions since his appointment as Assistant Professor in 2009, the most notable are his work on micromachined piezoelectric microphones, biomimetic microphone design, directional microphones, and Capacitive Micromachined Ultrasonic Transducers (CMUT). In each of these areas, Dr. Hall has significantly advanced the field."

Dr. Peter Rogers (Georgia Tech) rates Dr. Hall "as one of the best young researchers in his field. His enthusiasm, demonstrated creativity and growth indicate to me that he will be very successful in the future."

Dr. Gary Fedder (CMU) writes, "I believe Prof. Hall's trajectory in academia is highly positive and he has an exciting future ahead in his chosen research area. His progress is similar to other excellent faculty members in MEMS at this point in their careers."

Dr. Bernhard Boser (Berkeley) writes, "... the solution demonstrated by Dr. Hall is particularly attractive for small and portable devices including smart phones and emerging wearable devices. It is not surprising that Dr. Hall has been invited to give research presentations at all the major MEMS microphone companies including Infineon and Knowles as well as system integrators Apple and Google." He further writes that "The time required for developing the underlying processing capabilities without doubt explain the steady

increase of research results and publications over the past years, reaching an impressive 10 (published and accepted) journal publications in the 2013/14 academic year, a very impressive record indeed!”

However, a few of the reviewers commented on his publication record and number of citations.

Dr. Susan Trolier-McKinstry (Penn State) writes, “the number of peer-reviewed publications overall is modest compared to many candidates at a similar point in their academic careers.” However, she notes that it is likely attributed “to the time he spent as a post-doctoral scholar at Sandia, as well as the time spent in developing a start-up company.” She further indicates that “it is particularly encouraging to see the number of papers from his group increasing rapidly; there are as many as 10 papers that may come out this year” and “the quality of the journals is quite high.”

Dr. Gary Felder (CMU) writes, “His h-index is modest at 10 to 13 (depending on the method); however, this value is appropriate for his rank, particularly when one accounts for his steep rise in publications in the past few years.”

Dr. Thomas Kenny (Stanford) writes, “I note from Hall’s written statement that he has worked hard on the “ramp” of journal publications, and I believe that he has been successful in this effort. He describes a delay at the outset of his career associated with the installation of some important fabrication facilities, and it is clear that he’s been very successful since these installations were completed.”

Dr. Ronald Miles (SUNY Binghamton) writes, “In his research statement that was provided to me, he pointed out that his rate of publications was initially low and increased significantly in recent years. This can be partly explained by the nature of MEMS since many months of work can be required for each design iteration. Research that involves building things can require considerable time and effort before publishable results are produced. In addition to the time-consuming nature of this research, however, I would guess that part of the delay is due to Prof. Hall’s involvement with his start-up company, Silicon Audio. Starting companies is a dangerously high-risk endeavor for most untenured faculty members since one can succeed at just so many full-time jobs. Based on his research contributions, I believe he has managed this very well. As he moves forward, I hope that his interest in research and teaching will lead to a proper balance between his company and his faculty position.”

Approximately half of the external reviewers referred to Dr. Hall’s startup, Silicon Audio:

Dr. Karl Grosh (Michigan) writes, “Neal has led the formation and initial success of his company, Silicon Audio, through innovative technology, excellent grant writing success, and vision.” … “I am impressed by his progress here [product development], especially at this early stage in his career. This background will not only help him in commercializing his innovations, but also aid in the education of future entrepreneurs (students!). With regard to research, Neal has shown the capacity to do it all – create the innovation and transition it to a commercial product.”

Dr. Gary Fedder (Stanford) writes, “This class of devices is now being commercialized by Silicon Audio; this spinoff activity is impressive and undoubtedly greatly enhances the visibility of Prof. Hall’s work with industry.”

Advising and Student Mentoring

Dr. Hall has served as a primary supervisor for one PhD student, two MS students, and two post-doctoral fellows. He has supervised three senior lab projects (five students in each team). Furthermore, he mentored three summer interns through Women in Engineering Program (WEP), Graduates Linked with Undergraduates in Engineering (GLUE), and Research Experiences for Undergraduates (REU) programs. These supervisions resulted in two journal papers co-authored with undergraduate students (one is published and one is under review). In addition,

in 2012 and 2014, he served as technical advisor for MBA teams working on microphone commercialization projects. Dr. Hall is currently supervising four PhD students and two MS students.

University Service

Dr. Hall's university service is modest, but he has participated in faculty recruiting within the Department of Electrical and Computer Engineering and graduate student recruiting in both the Department of Electrical and Computer Engineering and the Department of Mechanical Engineering.

Professional Service

Dr. Hall is a member of one technical committee within the Acoustical Society of America. He also reviews papers for several journals.

Other Evidence of Merit or Recognition

Dr. Hall has been recognized for his scholarly contributions in many different ways. In the last two years, he was awarded ONR Young Investigator Award (2014) and DARPA Young Faculty Award (2012). These national awards are highly competitive and indicate Dr. Hall's excellence in research. Furthermore, Dr. Hall received a 2014 Regents' Outstanding Teaching Award from UT.

Overall Assessment

In summary, Dr. Hall is an outstanding teacher, recognized researcher, and accomplished entrepreneur. His research accomplishments are innovative, and have attracted attention of academic researchers and industry. He has been very successful enhancing the cleanroom facilities at the Microelectronics Research Center (MRC) and raising federal funding for his work and private equity for his startup.

Although I respect the concerns raised by the external reviewers regarding Dr. Hall's relatively slow transition to a faculty position, the relative importance of his start-up, and his publication record, I believe that there are many paths for successful faculty members. Given the emphasis on entrepreneurship and translating research results into practice within the Cockrell School of Engineering, I believe that Dr. Hall has taken an appropriate path. Accordingly, I believe that he meets or exceeds all expectations for promotion to associate professor and support this case without reservation.



Sharon L. Wood, Dean
9 November 2014

Statistical Summary for “In Rank”
Neal A. Hall

Metric	Value
Peer-reviewed Journal Publications	18
Peer-reviewed Conference Publications	3
Total Citations of all Publications (career)*	512
h-index (career)*	12
Google Scholar Total Citations of all Publications (career)	648
Google Scholar h-index (career)	13
Total Research Funding (\$)	\$3,390,896
Candidate Share Research Funding (\$)	\$1,850,284
Total Number of Grants/Contracts Received	9
Number of Grants/Contracts Received as PI	8
PhD Students Completed (count 1 if sole advisor, 0.5 if co-advised)	1
MS Students Completed (count 1 if sole advisor, 0.5 if co-advised)	2
PhD Students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	4
MS students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	2
Courses Taught	10
# of Students Taught	350
Average Instructor Evaluation UG	4.37
Average Instructor Evaluation Grad	4.45
Average Course Evaluation UG	4.1
Average Course Evaluation Grad	4.25
Teaching Awards	2014 Regents' Outstanding Teaching Award
Student Organizations Advised	--
Undergraduates Supervised	18
Journal Editorial Boards	--
Symposia Organized	1

*Source:

- Publish or Perish
- ISI Web of Knowledge

Budget Council Assessment on Teaching Performance for Faculty Promotion Candidate Neal Hall

This report was prepared by Budget Council Members Jack C. Lee and Sanjay Shakkottai, and is their evaluation of Dr. Neal Hall's teaching record.

Evaluation Procedure:

The evaluation procedure includes (a) reviewing Dr. Neal Hall's teaching portfolio and course evaluations (b) his graduate research supervision and (c) peer classroom reviews along with (d) comparing him to other Assistant Professors in the department.

Course Evaluation:

At the Assistant Professor level, Dr. Hall has taught two undergraduate courses (EE 313 and EE 363N/ME 279N) and one graduate course (EE384N). EE 313 (Linear Systems and Signals) is a required core undergraduate course with enrollment of 54-69. EE 363N/ME 279N (Engineering Acoustics) is a technical elective course in both ECE and ME departments with enrollment of 20-31. EE 384N (Electromechanical Transducers) is a graduate-level course cross-listed in ECE, ME and Physics departments with an enrollment of 8-19. Note that these enrollment numbers are from the classes taught by Dr. Hall.

Dr. Hall's course instructor rating are very good – EE 313 (4.4, 4.6, 4.6 and 4.5), EE363N (4.4 and 3.7) and EE 384N (4.8, 4.7 and 4.4). Note that the only relatively low score of 3.7 was from the Fall semester 2012 in EE 363N. Apparently, Dr. Hall was exploring a teaching innovation of introducing open-ended design projects. Some students really liked the new approach and some didn't. We applaud Dr. Hall for taking that risk and expending effort in trying a new innovative method of teaching.

In recognition of Dr. Hall's dedication to teaching, he was awarded with the 2014 Regents Outstanding Teaching Award, which is the Board of Regents' highest honor. Prof. Jack Lee (lead evaluator) was one of the committee members who nominated Dr. Hall for this award, and he strongly believes that Dr. Hall is well deserving of this prestigious award.

Graduate Research Supervision:

As an Assistant Professor, Dr. Hall has graduated one Ph.D. student in May 2014, with four more in progress. Of the four in progress, two are in candidacy. He has also graduated two M.S. students with two more in progress. The one Ph.D. and two M.S. graduates are all currently employed in high-tech companies. Overall Dr. Hall has a very active research program that has ample funding. His graduate students are acquiring research skills under his supervision.

Classroom Review:

Prof. Neal Hall's teaching has been evaluated by several peers over the last two years (Profs. Hao Ling, Jack Lee, Dean Neikirk). A comment that stands out across all these evaluations is Prof. Hall's great engagement with his class (even when he guest taught a class on a one-time basis, as noted in the evaluation of Prof. Neikirk).

The lead evaluator, Prof. Jack Lee had this to say: *On April 4, 2012, I, Jack Lee, personally attended Prof. Neal Hall's lecture during his EE313 Linear Systems and Signals class. There were at least 50 students attending the class. Based on my observation, Dr. Hall has an excellent presentation skill, excellent interaction with the students and he presented the materials and ideas clearly and concisely. With excellent rapport with students, his students questioned, answered, and commented many times (at least 30 times in 45 minutes) without slowing the progress of the class. That's impressive! He projected his voice to be easily heard. I sat in the back of the classroom and had no trouble of hearing his lecture. He is articulated and hardly had any verbalized pauses. He constantly made eye contact with students. He is humorous and gave interesting/ funny examples (e.g. ENS building under earthquake). Students laughed many times. His pace of delivery was excellent – students seemed to follow his lecture well without being bored.*

Comparison to other Assistant Professors in the Department:

Dr. Hall's course instructor evaluations are excellent. In comparison to other instructors, the average instructor rating across all sections of EE313 over the past five years (excluding Dr. Hall's sections) is 3.72, while Dr. Hall's average instructor rating is 4.52. This excellent teaching record was recognized by the "AXA Outstanding Professor Award" in 2012. For the other two courses (EE363N and EE384N), Dr. Hall is the only instructor and therefore cannot be compared to other instructors. In any case, those are excellent scores.

For graduate research, Dr. Hall has an active group. He has good funding for experimental/theoretical research in acoustics, transducers, and silicon micromachining. He is essentially the only person in the department who is working in the area of acoustics, transducers, and silicon micromachining. We believe that Dr. Hall is doing a great job leading his graduate researchers and establishing his research program.

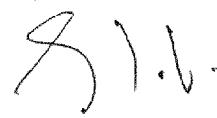
Summary:

Overall, we believe that Dr. Hall is doing an excellent job in teaching both the undergraduate and graduate students as well as establishing his research group.

Summary prepared by Budget Council Members Jack C. Lee and Sanjay Shakkottai.



Jack Lee (Lead evaluator)



Sanjay Shakkottai

Summary of Funding and Publications:**Table 1. Grants and Contracts Awarded while in Rank**

Co-Investigators	Title	Agency	Project Total	Candidate Share	Grant Period
PI: Hall (UT Austin)	Femto-Photonics: Towards Micromachined Underwater Acoustic Vector Sensors with Optoelectronic Readout	ONR (YIA)	\$509,911	\$509,911	05/15/2014 – 05/15/2017
PI: Caesar T. Garcia (Si-Audio, Inc.) Co-PI: Hall (UT Austin)	Micromachined Microphones with In-Plane and Out-of-Plane Directivity	NIH SBIR I	\$149,828	\$49,582	12/01/2013 – 08/31/2014
PI: Hall (UT Austin)	Ultra-Small, Ultra-Low-Noise, Broadband Acoustic Sensors	DARPA (YFA)	\$300,000	\$300,000	08/02/2012 - 08/01/2014
PI: Caesar T. Garcia (Si-Audio, Inc.) PI: Hall (UT Austin)	High Performance Directional Microphones for Communication Devices	NSF SBIR II	\$490,012	\$203,002	09/01/2010 - 02/28/2013
PI: Hall (UT Austin) Co-PI: Arjang Hassibi	Sub-1cm ³ , High Power Output Vibration Energy Harvester	DARPA	\$378,447	\$227,779	06/24/2010 - 01/31/2013
PI: Hall (UT Austin)	NNIN Exploratory Research: Vacuum-Sealed Microphones	NSF	\$50,000	\$50,000	05/01/2010 – 12/31/2010
PI: Caesar T. Garcia (Si-Audio, Inc.) PI: Hall (UT Austin) Co-PI: Arjang Hassibi (UT Austin)	High Performance Micromachined Microphones for Hearing Aids	NIH SBIR II	\$750,000	\$180,911	03/01/2010 - 05/31/2013
PI: Caesar T. Garcia (Si-Audio, Inc.) PI: Hall (UT Austin)	Micro-Seismometers via Advanced Meso-Scale Fabrication	DOE	\$737,698	\$304,099	10/01/2009 – 12/31/2012
PI: Hall (UT Austin)	Industry Gift	Silicon, Audio, Inc.	\$25,000	\$25,000	--
TOTAL	--	--	\$3,390,896	\$1,850,284	--

Statement Regarding Projects Division of Labor:

% division of labor follows % share of total budget in all cases.

Table 2. All Publications

Type	2014	2013	2012	2011	2010-09	Previous	Total at UT	Total
Journal	8*	5	2	1	2	12	18	30
Conference	--	--	--	1	2	11	3	14
Conference w/o Full Papers	--	3	0	2	1	4	6	10
Book Chapter	--	1	--	--	--	--	1	1
Patents	2	5	1	--	2	2	10	12

* 8 published or accepted + 2 in review, totaling 10

Table 3. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	18 [†]
Peer Reviewed Conference Proceedings Publications in Rank	3
Total Citations of all Publications (career)*	512
h-index (career)*	12
Google Scholar Total Citations of all Publications (career)	648
Google Scholar h-index (career)	13
Research Funding Raised (total share)	\$ 3,390,896
Research Funding Raised (candidate share)	\$ 1,850,284
Total Grants/Contracts Received	9
PI on Grants/Contracts Received	8

[†] 18 published or accepted + 2 in review, totaling 20

*Source:

- Publish or Perish
- ISI Web of Knowledge

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: 09/17/2014

RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS

Name: Deji A. Akinwande EID: da9563 Present Rank: Assistant Professor

Years of Academic Service (*Include AY 2014-15 in each count*):

At UT Austin since: 01/16/2010 In Present Rank: 5.50 In Probationary Status (TT only): 5
(month/day/year) (# of years) (# of full years)

Primary Department: Electrical and Computer Engineering College/School: Cockrell School of Engineering

Joint Department: - College/School: -

Other Department(s): -

Recommendation actions¹:

By Budget Council/Executive Committee: Promote

Vote² for promotion 33; Against 0; Abstain 1; Absent 1; Ineligible to vote 0

By Department Chair: Promote

By College/School Advisory Committee: Promote

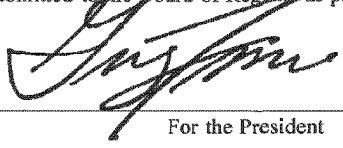
Vote for promotion 7; Against 0; Abstain 0; Absent 0

By Dean: Promote

Administrative Action: Promote to Associate Professor

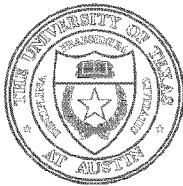
Date Action Effective: September 1, 2015

(To be submitted to the Board of Regents as part of the annual budget.)

By:  Date: December 17, 2014
For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.

²Record all votes for and against promotion, abstentions by eligible voting members, and the number of absent eligible voting members. The number of budget council/executive committee members ineligible to vote due to rank should also be recorded. Enter zero where it would otherwise be blank.



**THE UNIVERSITY OF TEXAS AT AUSTIN
COCKRELL SCHOOL OF ENGINEERING**

Office of the Dean • 301 E. Dean Keeton Street, C 2100 • Austin, Texas 78712-2100

Dean's Assessment

Deji A. Akinwande

Department of Electrical and Computer Engineering

Deji A. Akinwande received his BS and MS degrees in Electrical Engineering and Applied Physics from the Case Western Reserve University in 2000 and a PhD degree from Stanford University in Electrical Engineering in 2009. Dr. Akinwande started his tenure-track appointment as assistant professor in the Department of Electrical and Computer Engineering at the University of Texas at Austin in January 2010. If successfully promoted to associate professor, Dr. Akinwande will have served in rank of assistant professor for five and a half years; therefore, this case may be considered as an early promotion.

Ten external references were submitted as part of the promotion dossier, five reviewers were chosen by the candidate and five were selected by the department's budget council. The reviewers include nine full professors from a broad range of departments at peer institutions and a founder of a start-up. The home institutions of the reviewers include the University of California, Berkeley; the University of Illinois at Urbana-Champaign; Northwestern University; the University of Cambridge; Princeton University; and the University of California, Santa Barbara. Most of the letter writers hold chaired professorships, and several have served as department chairs, deans, or directors of research centers. Two letter writers are members of the National Academy of Engineering.

Teaching

Dr. Akinwande teaches courses on electronic circuits and solid-state devices. Since joining UT in Spring 2010, he has taught three different courses a total of eight times: one undergraduate technical core course (EE 438, *Introduction to Microelectronic Circuits*) taught three times, one undergraduate elective that is co-listed as a graduate course (EE 338L/EE 382M, *Analysis and Design of Analog Integrated Circuits*) taught twice, and one graduate course (EE 396V, *Carbon Nanotube and Graphene Device Physics*) taught three times. EE 438 includes a laboratory component, and Dr. Akinwande was involved in updating the laboratory component of this course. The graduate course was a new course on carbon device physics that Dr. Akinwande developed.

Dr. Akinwande's average instructor rating in all the courses (4.4) is higher than the departmental average (4.16) for assistant professors. In fact, except for one isolated instance of securing an instructor rating of 3.8 in his first undergraduate course, Dr. Akinwande has received instructor ratings above 4.0. Furthermore, Dr. Akinwande has demonstrated substantial improvement in his ratings during the second (and third) times that he has taught a course. The most recent ratings in 2013 are impressive, with 4.7 in EE 438 (spring), 4.6 in EE 396 (spring), and 4.7 in EE 338L/EE 382M (fall). Also, two of the end-of-term projects from his graduate course eventually became peer-reviewed publications. In addition, Dr. Akinwande has co-authored a textbook with his PhD advisor (published by Cambridge University Press), which he uses for his graduate elective class.

Only two peer reviews are included in the dossier. Dr. Orshansky attended Dr. Akinwande's EE 438 undergraduate class in fall 2012 and Dr. Akinwande presented a guest lecture in Dr. Yu's EE 396K-23 (*Semiconductor Heterostructures*) class in spring 2014. Both reviews were positive and highlighted Dr. Akinwande's ability to engage the students.

The department chair's letter points to the fact that Dr. Akinwande took it upon himself to attend a three-day National Effective Teaching Institute workshop organized by the American Society of Engineering Education in order to improve his teaching skills. He has implemented lessons learned from this workshop, most notably active learning, into his classes. Dr. Akinwande's dedication to teaching is also evident in his development of a new

graduate certificate program in nanomanufacturing at UT Austin that consists of courses in nanomaterials, nanoscience, and entrepreneurship. He will serve as the inaugural director of this program when it begins in 2015.

Research

Dr. Akinwande's research is in the area of 2D electronic materials. He has focused in two areas: (1) integrating graphene into silicon wafer nanotechnology and (2) development of flexible substrates. His work has a two-pronged approach, one devoted to device level development and the other towards the fundamental scientific aspects of the problem. As Dr. Akinwande explains in his research statement, this effort is sustainable over the long term with the expectation that the basic science is poised to grow over the next couple of decades and the applied aspects over an even longer time.

While in rank, Dr. Akinwande has published 36 refereed archival journal papers (47 career total). These papers are in some of the top journals in the fields of both electrical engineering and materials science, including *Nature Communications*, *Nano*, *ACS Nano*, *Small*, *Applied Physics Letters*, and *IEEE Electron Device Letters*. Most of these papers are co-authored with his graduate students. He has also published 20 refereed conference proceedings in rank (31 career total), co-authored one book, and filed two patent disclosures (one patent was issued before he joined UT). He has given 26 invited talks in rank (32 career total). Dr. Akinwande's work was selected among the "Best of 2012" research highlights by Nanotechweb, an online news portal. On Google Scholar, his publications have been cited almost 1000 times and his h-index is 19.

Dr. Akinwande was awarded eight grants as PI in rank (five as the sole PI and three with a co-PI). In addition, he is a co-PI on two multi-investigator programs: the Nanoelectronics Research Initiative *Southwest Academy of Nanoelectronics* (SWAN), funded by the Semiconductor Research Consortium, and the Engineering Research Center *Nanomanufacturing Systems for Mobile Computing and Energy Technologies* (NASCENT), funded by the National Science Foundation. The total funding, including the large centers is about \$29 million, and Dr. Akinwande's portion of the funding exceeds \$3.5 million. Grants have been received from several federal agencies, such as the National Science Foundation and various offices within the Department of Defense. Among his single-investigator awards, he received a CAREER Award from NSF, a Young Investigator Award from the Defense Threat Reduction Agency, and a Young Investigator Award from the Army Research Office.

The external references are exceptional and describe in great detail the quality, impact, and visionary aspects of Dr. Akinwande's research.

Dr. Ilesanmi Adesida (UIUC, NAE), writes, "Professor Akinwande is an up and coming star in the broad field of nanoelectronics/nanotechnology... I am amazed by his progress and achievements during his short time as an Assistant Professor...I strongly recommend him for promotion to the position of Associate Professor. If he were at Illinois with his record, he would be promoted most enthusiastically."

Dr. John Rogers (UIUC, NAE) writes, "Deji has established a style and quality of research that will allow him to maintain first-rate programs in these and other related areas for years to come... The scientific content, conceptual advances and technology significance of Deji's programs...represent a level of achievement consistent with a top academic researcher in electrical engineering and materials science, at this stage in their career"

Dr. Vivek Subramanian (UC Berkeley) writes, "I ignore a large number of publications in this space as fluff; I *never* ignore Deji's work – it is of high quality, and I always feel that I can trust his analysis, insight, and care. There can be few higher standards for evaluating an engineer than this, and Dr. Akinwande passes with flying colors."

One letter by Dr. Kaustav Bannerjee (UC Santa Barbara) contains statements that are subject to interpretation, but they are to be seen as generally positive: "Granted, a number of these publications are co-authored with a variety

of other researchers, some of whom are well known authorities in the subject field of the paper. Yet, this level of productivity and breadth is quite unusual for a researcher in his age or career group.” “In terms of impact, while none of his papers can yet be termed as ‘classic’, his experimental demonstrations of flexible electronics with emerging nanomaterials such as graphene and other 2D materials do open up interesting possibilities and can potentially trigger a lot of research in the near future.” “To summarize, I believe Dr. Akinwande’s research accomplishments and impact, along with his growing visibility in the research community, awards and honors received, and his services to the technical community, will make a pretty convincing case for promotion to Associate Professor at most universities.”

In summary, Dr. Akinwande has established a strong, sustainable, well-funded, and internationally respected research program. He has guided graduate student doctoral research and published in high-impact journals.

Advising and Student Mentoring

Dr. Akinwande has graduated four PhD students (two were co-supervised) and he is currently supervising 13 PhD students (three co-advised). He graduated two MS students (one co-supervised). He has also supervised/mentored two post-doctoral research fellows and nine undergraduate students.

As Education Director for the NASCENT Center, Dr. Akinwande is also involved in advising K-12 students, teachers under the RET program, and undergraduate students under the REU program. He is also involved in advising students through Graduate Student Council and the National Society of Black Engineers.

University Service

Dr. Akinwande has a broad portfolio of university service. At a departmental level, Dr. Akinwande serves as the Area Advisor for both undergraduate and graduate students in the Solid-State area, a task which involves advising students in planning their curriculum and program of work, as well as identifying internships and career opportunities. Dr. Akinwande has also served as a member of the ECE Graduate Student Recruiting Committee. At the university level, Dr. Akinwande serves as the University Education Director for the NASCENT Center. Moreover, Dr. Akinwande has served on the Equal Opportunity in Engineering committee within the Cockrell School. He also serves as the faculty advisor for the student chapter of the National Society of Black Engineers.

Professional Service

Dr. Akinwande has served on numerous professional and governmental committees. Dr. Akinwande organized an Army Research Office (ARO) sponsored technical session on 2D Atomic Sheets (2014) and co-organized an NSF-KAUST Conference in Saudi Arabia (2014). He co-organized sessions at national meetings of the Materials Research Society and American Physical Society. He also serves as a committee member of 2014 IEEE Device Research Conference Technical Committee and the 2013 IEEE Nano Conference Technical Committee.

Other Evidence of Merit or Recognition

Dr. Akinwande has been recognized for his contributions in many ways. He has received Young Investigator Awards from the Defense Threat Reduction Agency and the Army Research Office. He also received a CAREER Award from the National Science Foundation. He received the Inaugural IEEE NANO “Geim and Novoselov Graphene Prize” in 2012. He has presented special lectures at more than 20 universities, conferences and organization.

Overall Assessment

Dr. Akinwande has experienced an excellent start in his academic career. He is an excellent teacher who brings innovation to his course material, has dedicated time and energy to developing a new course and novel textbook in his field, and has used innovation to improve his pedagogical techniques to reach diverse populations. His research accomplishments are ground-breaking, and have attracted international attention. His efforts in developing 2D nanostructures based both on silicon technology and flexible substrates have the potential to revolutionize the future of microelectronics. He has been very successful in securing funding for this work from a diverse set of agencies, has a well-developed plan to sustain his research effort, and is considered to be the leader in this area. He has graduated four PhD students (two co-supervised) and two MS students (one co-supervised). The external references, from respected researchers from peer institutions, are very strong, even effusive, about Dr. Akinwande's accomplishments and promise, and uniformly recommend promotion.

I believe that Dr. Akinwande exceeds all expectations for early promotion to associate professor, and support this case without reservation.



Sharon L. Wood, Dean
2 November 2014

Statistical Summary for “In Rank”

DEJI AKINWANDE

TI/Jack Kilby Faculty Assistant Professor
Department of Electrical and Computer Engineering, UT-Austin

Metric	Value
Peer-reviewed Journal Publications	36 of 47
Peer-reviewed Conference Publications	20 of 31
Total Citations of all Publications (career)*	789
h-index (career)*	17
Google Scholar Total Citations of all Publications (career)	893
Google Scholar h-index (career)	19
Total Research Funding (\$)	\$29,199,089
Candidate Share Research Funding (\$)	\$3,548,738
Total Number of Grants/Contracts Received	10 of 10
Number of Grants/Contracts Received as PI	8 of 10
PhD Students Completed (count 1 if sole advisor, 0.5 if co-advised)	3 (4 students/2 co-advised)
MS Students Completed (count 1 if sole advisor, 0.5 if co-advised)	1.5 (2 students/1 co-advised)
PhD Students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	11.5 (13 students/3 co-advised)
MS students in Pipeline (as of 09/2014) (count 1 if sole advisor, 0.5 if co-advised)	1
Courses Taught	10
# of Students Taught	301
Average Instructor Evaluation UG	4.38/5.0
Average Instructor Evaluation Grad	4.40/5.0
Average Course Evaluation UG	4.09/5.0
Average Course Evaluation Grad	4.23/5.0
Teaching Awards	0
Student Organizations Advised	2 (NSBE and GEC)
Undergraduates Supervised	9
Journal Editorial Boards	0
Symposia Organized	5

*Source:

- Publish or Perish
- ISI Web of Knowledge

THE UNIVERSITY OF TEXAS AT AUSTIN

Date: 9/4/13

RECOMMENDATION FOR CHANGE IN ACADEMIC RANK/STATUS

Name: Sujay Sanghavi Present Rank: Assistant Professor

Years of Academic Service (*Include AY 2013-14 in each count*):

At UT Austin since: 9/1/09 In present rank: 5; In Probationary Status (TT only): 5
(m/d/y) (# of years) (# of years)

Department: Electrical and Computer Engineering

Other:

College/School: Cockrell School of Engineering

Recommended action¹:

By Budget Council/Executive Committee: Promote to Associate Professor

Vote² for promotion 25; Against 1; Abstain 0; Absent 9

By Department Chair: Promote to Associate Professor

By SBS Executive Committee: _____

Vote² for promotion _____; Against _____; Abstain _____; Absent _____

By Director: _____

By College/School Advisory Committee: Promote

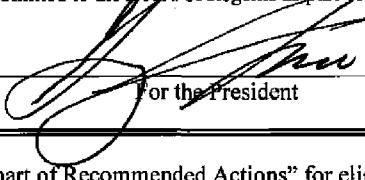
Vote² for promotion 7; Against 0; Abstain 0; Absent 0

By Dean: Promote

Administrative Action: Promote to Associate Professor

Date Action Effective: September 1, 2014

(To be submitted to the Board of Regents as part of the annual budget.)

By: 

Date: 12/16/2013

For the President

¹See "Chart of Recommended Actions" for eligible recommended actions applicable to specific conditions and administrative levels.

²All votes are to be recorded as For, Against, or Abstain. (Note: unexplained abstentions will be interpreted as weak negative votes by the President's Committee.) Also record number of absent eligible voting members.

Dean's Assessment
Sujay Sanghavi
Department of Electrical and Computer Engineering

Sujay Sanghavi received his Bachelor of Technology in Electrical Engineering from the Indian Institute of Technology-Bombay (2000). He subsequently received an MS in Electrical and Computer Engineering (2002), an MS in Mathematics (2005), and a PhD in Electrical and Computer Engineering (2006) from the University of Illinois at Urbana-Champaign. He continued his research as a postdoctoral scholar at the Massachusetts Institute of Technology for two years. Prior to being hired as an assistant professor in the Department of Electrical and Computer Engineering at UT Austin, he was an assistant professor at Purdue University for one year. If successfully promoted to associate professor, Dr. Sanghavi will have served in rank as an assistant professor for six years, with five years at UT.

Ten external letters were submitted as part of the promotion dossier, five were suggested by the candidate and five were selected by the budget council. All reviewers are faculty at peer institutions in the US. Two reviewers are members of NAE.

Teaching

Dr. Sanghavi has taught one undergraduate course and four graduate courses: EE 351K, *Probability, Statistics, and Random Processes* (three times); EE 381J *Probability and Stochastic Processes I* (two times); EE 381V *Sparsity, Structure, and Algorithms* (two times); and a two-class sequence with Dr. Constantine Caramanis, EE 381V *Large-Scale Optimization* (one time) and EE 381V *Large-Scale Learning* (one time). His weighted average instructor/course ratings for these courses are 3.8/3.1, 4.0/3.7, 4.2/4.2, 3.7/3.7, and 3.8/3.7 respectively. Dr. Sanghavi's ratings are below the weighted average/median instructor ratings for assistant professors in the Department of Electrical and Computer Engineering over the last five years (4.06/4.08 for undergraduate courses) and (4.22/4.36 for graduate courses).

In the past six years, seven tenured and tenure-track faculty members have taught 31 sections of EE 351K. The instructor ratings in EE 351K varied between 2.5 and 4.6, with an average of 3.79. Dr. Sanghavi's ratings in EE 351K are consistent with the departmental norms in this class. The budget council in Electrical and Computer Engineering concluded that Dr. Sanghavi is an innovative teacher, but recognized the need for improvement at the graduate level.

Research

Dr. Sanghavi's research field is information science in which his focus is on developing inference from large-scale data and modeling, and control of large-scale networks. He has made significant contributions in four main areas: mathematical signal processing, high-dimensional statistics, information theory, and networking.

He has published nine journal papers and thirteen papers in highly selective journals in rank. In his career, he has 12 journal papers and 34 refereed papers in conference proceedings of varying selectivity. He has been awarded seven research grants, four of which are from the National Science Foundation, two from the Army Research Office and one from the Defense Threat Reduction Agency (DTRA). He is the PI on five of these grants. His total funding of \$3.4 million (\$2 million his share) includes an eighth award from the corporate affiliates to the Wireless Networking and Communications Group, which is a joint effort among the group.

Dr. Sanghavi has significantly broadened his research focus beyond the scope of his PhD and postdoctoral work. The quality, breadth and depth of his research are highlighted in all of the external letters.

Dr. Emmanuel Candes (Stanford University) writes, “Sanghavi’s CV is impressive. His productivity is astounding. The number of collaborative projects and the amount of financial support he is receiving is staggering. Finally, his visibility, as evidenced by the number of invited talks he has given in recent years, and memberships to technical program committees of top conferences in the field cannot possibly higher for someone this young.” “In summary, Sujay has made groundbreaking contributions and is regarded as a world leader in his field.”

Dr. Kannan Ramchandran (University of California, Berkeley) writes, “Sujay’s research not only brings deep theoretical understanding to very complicated problems in large-scale systems, but goes the extra mile in formulating practical algorithmic solutions that have guaranteed performance. This is a rare combination that makes Sujay’s research stand out, as he straddles the bridge between exotic theory and practical impact in a way that few researchers have both the intellect and the guts to pull off.”

Dr. John Tsitsiklis (Massachusetts Institute of Technology, NAE) emphasized the quality and breadth of Dr. Sanghavi’s research: “He obtains strong and insightful results, and also sets a new direction in the network inference field. This is one of the best works on inference of network phenomena that I have seen.” “...Sujay’s contributions [sic] also extend to the subject of networking. ... This work is distinguished by its novel algorithm structure and its insightful mathematical analysis.” “His work on link scheduling in wireless networks using local information is also distinguished by its novelty and clever analysis, and has been widely cited.”

Dr. P.R. Kumar (Texas A&M University, NAE) writes, “Sujay is a wonderfully deep and broad ranging researcher. He is very creative, and has made a number of excellent contributions.” “Every time I hear Sujay speak, I am absolutely fascinated by the novelty, clarity and beauty of the results that he is able to constantly come up with, and each time in a completely different area!”

Dr. Alfred Hero (University of Michigan) writes, “Sujay Sanghavi has distinguished himself as one of the most versatile rising stars in the field.”

Advising and Student Mentoring

While in rank, Dr. Sanghavi has graduated one PhD student, one co-advised PhD student, and one MS student. He currently has two PhD students and three co-supervised PhD students in the pipeline. He has also mentored a senior design team of five students.

University Service

Dr. Sanghavi has served on several committees within the Department of Electrical and Computer Engineering. He has been actively engaged with graduate student recruiting and admissions and he has been the faculty organizer for the weekly seminar series within the Wireless Networking and Communications Group, which hosts approximately 20 invited speakers each year.

Professional Service

Dr. Sanghavi has served on the technical program committees for numerous technical conferences and workshops, including the 2014 top conference in the field of networks.

Other Evidence of Merit or Recognition

Dr. Sanghavi received a CAREER Award from the National Science Foundation (2010) and a Young Investigator Award from the Defense Threat Reduction Agency (DTRA).

Overall Assessment

Dr. Sanghavi is recognized as one of the young stars in the field of networks and he has developed a strong research program. His performance as a teacher has been adequate, and he has demonstrated a solid commitment to service both within the University and to the profession.

Accordingly, I recommend promotion of Sujay Sanghavi to associate professor with tenure.



Sharon L. Wood, Interim Dean
2 November 2013

Candidate's Statement on Research

Table 1. Research Summary

Metric	Value
Peer-Reviewed Journal Publications in Rank	9
Corresponding Author on Peer-Reviewed Publications in Rank	31
Peer Reviewed Conference Proceedings Publications in Rank	22
Total Citations of all Publications	1122
h-index	19
Research Funding Raised (\$) (candidate share)	3,431,000 (2,006,000)
Total Grants/Contracts Received	7
PI on Grants/Contracts Received	5

Table 2. Grants and Contracts Awarded while in Rank

Co-Investigators	Title	Agency	Project Total/	Candidate Share	Grant Period
Co-PI; PI Y (dept)					
I am sole PI	CAREER: Networks and Statistical Inference: New Connections and Algorithms	National Science Foundation	\$425,000	\$425,000	2/2010-2/2015
I am primary PI. Shakkottai and Vishwanath (both ECE) are co-PIs	Shaping, Learning and Optimizing Dynamic Wireless Networks	National Science Foundation	\$900,000	\$250,000	3/2010 – 2/2014
I am primary PI. Shakkottai (ECE) is co-PI	Social Networks in the Real World: From Sensing to Structure Analysis	National Science Foundation	\$499,999	\$250,000	9/2010 – 9/2014
I am co-PI. Shakkottai (ECE) is primary PI.	STIR: Inferring Implicit Human Social Network Structure from Multi-modal Data	Army Research Office	\$50,000	\$25,000	9/2010 – 9/2011
I am co-PI. Shakkottai (ECE) is primary PI.	Inferring Implicit Human Social Network Structure from Multi-modal Data	Army Research Office	\$300,000	\$150,000	9/2011 – 9/2014
I am sole PI	Young Investigator Award: Cascading Failures in Networks: Inference, Intervention and Robustness	Defense Threat Reduction Agency (DTRA)	\$500,000	\$500,000	2012-2017
I am primary PI. Caramanis (ECE) is co-PI.	New Approaches to Robustness in High-Dimensions	National Science Foundation	\$700,000	\$350,000	2013-2017
I am a co-PI. This is a joint ORU effort.	WNCG Affiliates Program	Various industrial affiliates.	\$56,000	\$56,000	2009-2013
TOTAL			3,431,000	2,006,000	

Budget Council Statement

Teaching

This statement on teaching for Assistant Professor Sujay Sanghavi was prepared by Electrical and Computer Engineering Department Budget Council Members Professor Ross Baldick and Professor Vijay K. Garg. The statement was prepared following a review of the course instructor survey information, peer review, and also based on personal knowledge of the candidate.

Introduction

Dr. Sujay Sanghavi is a key member of the communications, networks, and systems faculty, with teaching and research interests in the areas of inference from large-scale data and control of large-scale networks.

Summary: Innovative teacher with significant contributions in both existing and new courses. Some need for improvement in graduate teaching.

Principal Areas of Teaching

At the undergraduate level, Dr. Sujay Sanghavi has taught the core undergraduate level course on Probability, Statistics and Random Processes (EE351K). This is a required course for all ECE students and provides foundational material for more advanced courses in communication theory, systems theory, signal processing, machine learning, “big data,” and other areas of electrical and computer engineering.

At the graduate level, he has taught the core graduate class Probability and Stochastic Processes (EE 381J), and introduced *three* new advanced graduate classes: Sparsity, Structure, and Algorithms (EE 381V), Large-scale Optimization (EE 381V), and Large-scale Learning (EE 381V), the last two were co-taught with Professor Constantine Caramanis. The graduate classes all fit into the context of the Communications, Networks and Systems (CommNetS) graduate area. Probability and Stochastic Processes (EE381J) is the graduate “counterpart” of EE351K in that it provides foundational material, at the graduate level, in probability and random processes. Though an introductory graduate class, it takes a sophisticated approach to probability and stochastic processes and requires deep knowledge to teach effectively. The advanced graduate classes take a view of data analytics and optimization that specifically focuses on large-scale data, building on relatively recent ideas in the structure of data to unlock insights about it, and utilizing approaches that are particularly suitable to “big data” in the contexts of both optimization and learning. Large-Scale Optimization (EE381V) and Large-scale Learning (EE381V) were particularly ambitious classes, since they were developed as a two-class sequence that was co-taught by Professor Constantine Caramanis. Over 53 students enrolled in their Large-scale Optimization course. This large enrollment is very impressive for such an advanced class.

Teaching Evaluation Procedures and Measures

Professor Baldick has taught EE351K and teaches an introductory graduate optimization class in the Electrical and Computer Engineering Department. Professor Garg teaches Concurrent and Distributed Systems (EE360P) and Distributed Systems (EE382N) and has taught Data Structures (EE322C). Both of us are members of the communications, networks, and systems (CommNets) area faculty. Consequently, we have broad familiarity with Dr. Sanghavi's area of teaching, and can evaluate his teaching objectively and comprehensively.

As Dr. Sanghavi mentions in his teaching statement, he introduced several innovations in his classroom practice for EE351K, including video recording. Although neither of us were the peer evaluator for Dr. Sanghavi, Professor Baldick sat in on one of his lectures in Fall 2012 to observe his style of teaching and the practicalities of the video recording. The experience showed an attentive classroom of students who were asking and being asked questions. In addition, we have reviewed his teaching record, information about classes taught, student evaluations, and the peer review to evaluate his teaching.

The student evaluations utilized the standard UT online course instructor survey (CIS). Prof. Caramanis conducted the in-class peer evaluation.

Summary of Teaching Evaluations

Year	UNDERGRADUATE					GRADUATE			
	Course	Enroll	Instructor	Course	Course	Enroll	Instructor	Course	
Spring 13					EE381V	27	3.8	3.7	
Fall 12	EE351K	53	4.1	3.1	EE381V	53	3.7	3.7	
Spring 12					EE 381V	28	4.3	4.2	
Fall 11	EE351K	58	3.4	3.0					
Fall 10	EE 351K	53	3.8	3.3	EE 381J	29	3.9	3.8	
Spring 10	EE381V	25	4.1	4.1					
Fall 09					EE381J	31	4.0	3.9	

As context for the scores, we calculated summary statistics for other sections of comparable courses. Turning first to Probability, Statistics and Random Processes

(EE351K), there have been 22 sections of EE351K taught since Fall 2009 for which instructor statistics are available at the time of writing this statement. All sections had over 20 respondents, and the following statistics are simple averages of scores over the sections taught. The Instructor average for sections of EE351K taught since Fall 2009, but not including Prof. Sanghavi in the statistics, is 3.86. (Each section was taught by a tenured or tenure track ECE Department faculty member, including Assistant, Associate, and Full Professors.) Prof. Sanghavi's Instructor average for his sections of EE351K is 3.76. This is a little lower than the average for the other Instructors, which is not atypical of the first years of teaching this course. The Course average for sections of EE351K taught since Fall 2009, but again not including Prof. Sanghavi in the statistics, is 3.32. Prof. Sanghavi's Course average is 3.13, again a little lower than the average for the other Instructors.

There have been 4 sections of Probability and Stochastic Processes (EE 381J) taught since Fall 2009. Two sections were taught by two other more senior faculty, and their average Instructor score was 4.65. Prof. Sanghavi's score was 3.95, which is significantly lower. The average Course score for the other faculty was 4.4. Prof. Sanghavi's score was 3.85, again significantly lower. There is some need for improvement in Prof. Sanghavi's teaching of this important graduate class.

Finally, turning to EE381V, this course number is used for several different topics classes and the particular topics that Prof. Sanghavi covered differs from other instructors (and he has taught different topics in different semesters). Consequently, comparisons just to other sections of EE381V are not necessarily very informative. Prof. Sanghavi's average Instructor score is 3.975 and his average Course score is 3.925. These scores are in line with, but somewhat below, averages over other advanced graduate classes in ECE. Again, there is some need for improvement in Prof. Sanghavi's teaching at the graduate level.

Quotes from Teaching Evaluations

Some of the comments left by students are given below. They generally show Dr. Sanghavi to be an engaged teacher, providing challenging material and being responsive to questions.

In relation to Probability, Statistics and Random Processes (EE351K):

“Loved the class!!”

“You were receptive of our questions and addressed them well.”

“Overall, this course was very challenging because of the material but you explained the material well.”

“Dr. Sanghavi presented the material well. I enjoyed the lectures.”

“This was difficult course, but Sanghavi was always willing to help.”

"Loved the course! Professor was good at explaining, interesting to listen to, and very approachable."

"Course is well organized, not too difficult to follow the material and graded fairly."

"Very easy to talk to."

"Great job Prof. Sanghavi. You should consider dividing the class in two courses, the amount of hard material is excessive."

"The course was good and taught well."

"Good in-class examples."

In relation to EE381J:

"Good course, Encouraged classroom participation."

"The course is good. The instructor is excellent."

"Very good prof. and course."

"I like the format of using examples in class. The HW was reasonable."

In relation to EE381V:

"The course is pretty well-organized."

"The topics in this course are good."

"Good course and great instructor. Course should be videotaped as intuition provided by instructor is fabulous."

"Prof. Sanghavi was a good lecturer and did a good job organizing the course, providing challenging homeworks, and relating the topics in the course to current research and applications."

"The course has been really fascinating. I have learned a lot."

There were, however, some negative comments. As well as several comments about handwriting, there were some concerns about connection of lecture material to homeworks and midterms, the need for additional examples, and some classroom style issues. Some of these quotes appear below.

In relation to EE351K:

"1) Talk slower/give us time to take notes, most of the time I only had time to take notes, not enough time to understand.

2) Please try to get better examples, stick breaking doesn't convey information well.

3) Please try to make your practice test in some way related to your actual tests, as it was I could essentially bet that anything on your practice test wouldn't show up on the actual test."

"The class would learn more if the homework was relevant to the tests."

"Need easier tests."

"Class notes were not great. More examples! HW often presented things I had no idea how to do, and the book did not have enough examples to compensate."

"More homework-like problems being solved in class would be helpful."

"At times the professor was very confusing. He taught well but made a lot of assumptions about the class (prior knowledge) that could have been avoided. I feel like if he gave a lot more examples, it would have been better."

"I wish you would focus more on the reasoning behind probability, and less on the math. I feel like I'm walking out of this course with a set of equations and not a set of reasoning skills."

"The tests were unreasonably hard."

In relation to EE381J:

"The course is too difficult and the textbook makes me confused. I hope we have PPT (slides) on class. The quiz is too difficult."

"Instructor was not great overall. 5—10 minutes late to class at least once a week. Did not seem to be prepared to explain the material. Appeared easily distracted. I think Dr. Sanghavi has the potential to be a great teacher. He just needs to come on time and come prepared, confident and ready to teach."

In relation to EE381V:

"There is scope to make it "crisper." The broad idea was clear but often the material was not completely clear (to me). Please make more figures, and always label figures clearly. Please make pre-reqs very explicit in class. Many parts were taught very nicely."

"Very poorly managed and taught course."

Balance Between Graduate and Undergraduate Teaching

Dr. Sanghavi has taught one required undergraduate course (EE 351K) three times that is a key part of the ECE curriculum for all technical areas. At the graduate level, he has taught both an introductory graduate course and advanced courses that have been developed by him.

Teaching Portfolio

From his Teaching Portfolio, it is clear that Dr. Sanghavi teaches mathematically rigorous classes. The advanced classes build on recent developments and are aimed at providing students with background to become researchers in these areas.

Participation on Graduate Committees

Dr. Sanghavi has graduated two Ph.D. students while in-rank (one sole advisor and one co-advised advised). He is currently supervising 6 PhD students (two of whom are post-

candidacy; three of whom are co-advised). He has been active in serving on thesis and dissertation committees. All of his metrics in this regard are exemplary.

Innovative Contributions

The video recording of his undergraduate class EE351K has been popular with students, and useful for students reviewing material.

In-Class Peer Evaluation

Prof. Constantine Caramanis did the in-class peer evaluation of Dr. Sanghavi's teaching on April 25th, 2013. He is an expert in the area of optimization and learning and is well qualified to evaluate Dr. Sanghavi's in-class teaching for EE 381V: Large Scale Learning. According to Prof. Caramanis, Dr. Sanghavi is "a very methodical, effective and intentional teacher, at all stages, from planning, to developing course materials, to teaching in front of the classroom." Moreover, "By leading students through the thought process of understanding where a particular solution stumbles, he does a very successful job of building intuition and understanding, even on the most technically demanding topics."

It is quite evident from the peer evaluation that Dr. Sanghavi is a very effective teacher for even those courses that require mathematical sophistication from students.

Summary

Based on our study of Dr. Sujay Sanghavi's teaching career at UT-Austin, and in consultation with our colleagues, we believe that Dr. Sanghavi is qualified for promotion to Associate Professor, in regards to Teaching.

Prepared by

Ross Baldick

Ross Baldick
Professor and Leland Barclay Fellow
Department of ECE
The University of Texas at Austin

Vijay K. Garg

Vijay K. Garg
Cullen Trust for Higher Education
Endowed Professor,
Department of ECE
The University of Texas at Austin.